

Connecting via Winsock to STN

Welcome to STN International! Enter :::

LOGINID:SSPTAJRK1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * * * Welcome to STN International * * * * * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 DEC 01 ChemPort single article sales feature unavailable
NEWS 3 APR 03 CAS coverage of exemplified prophetic substances enhanced
NEWS 4 APR 07 STN is raising the limits on saved answers
NEWS 5 APR 24 CA/Caplus now has more comprehensive patent assignee information
NEWS 6 APR 26 USPAITFULL and USPAT2 enhanced with patent assignment/reassignment information
NEWS 7 APR 28 CAS patent authority coverage expanded
NEWS 8 APR 28 ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS 9 APR 28 Limits doubled for structure searching in CAS REGISTRY
NEWS 10 MAY 08 STN Express, Version 8.4, now available
NEWS 11 MAY 11 STN on the Web enhanced
NEWS 12 MAY 11 BEILSTEIN substance information now available on STN Easy
NEWS 13 MAY 14 DGENE, PCTGEN and USGENE enhanced with increased limits for exact sequence match searches and introduction of free HIT display format
NEWS 14 MAY 15 INPADOCDB and INPAFAMDB enhanced with Chinese legal status data
NEWS 15 MAY 28 CAS databases on STN enhanced with NANO super role in records back to 1992
NEWS 16 JUN 01 CAS REGISTRY Source of Registration (SR) searching enhanced on STN

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN customer agreement. This agreement limits use to scientific research. Use for software development or design, implementation of commercial gateways, or use of CAS and STN data in the building of commercial products is prohibited and may result in loss of user privileges

and other penalties.

FILE 'HOME' ENTERED AT 19:34:34 ON 16 JUN 2009

=> file reg
COST IN U.S. DOLLARS
SINCE FILE ENTRY SESSION
0.22 0.22
FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 19:34:43 ON 16 JUN 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 JUN 2009 HIGHEST RN 1158168-92-3
DICTIONARY FILE UPDATES: 15 JUN 2009 HIGHEST RN 1158168-92-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

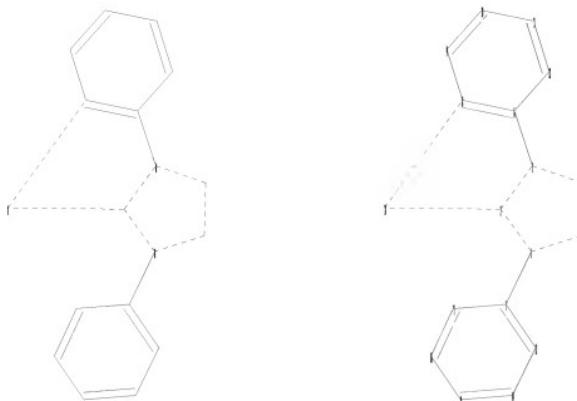
TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stnqen/stndoc/properties.html>

=>
Uploading C:\Program Files\Stnexp\Queries\10568344\Struc 3.str



ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
chain bonds :
1-7
ring bonds :
1-2 1-5 2-3 2-18 3-4 3-6 4-5 6-8 6-12 7-13 7-17 8-9 8-18 9-10 10-11
11-12 13-14 14-15 15-16 16-17
exact/norm bonds :
1-2 1-5 1-7 2-3 2-18 3-4 3-6 4-5 8-18
normalized bonds :
6-8 6-12 7-13 7-17 8-9 9-10 10-11 11-12 13-14 14-15 15-16 16-17

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

```
=> 11
SAMPLE SEARCH INITIATED 19:35:07 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      3677 TO ITERATE

54.4% PROCESSED      2000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)          9 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE    **COMPLETE**
                        BATCH     **COMPLETE**
PROJECTED ITERATIONS:      69903 TO      77177
PROJECTED ANSWERS:         86 TO       574

L2          9 SEA SSS SAM L1

=> 11 full
FULL SEARCH INITIATED 19:35:09 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      73297 TO ITERATE

100.0% PROCESSED      73297 ITERATIONS          765 ANSWERS
SEARCH TIME: 00.00.02

L3          765 SEA SSS FUL L1
```

```
=> file caplus
COST IN U.S. DOLLARS                               SINCE FILE      TOTAL
FULL ESTIMATED COST                           ENTRY SESSION
                                                185.88   186.10
```

FILE 'CAPLUS' ENTERED AT 19:35:17 ON 16 JUN 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 16 Jun 2009 VOL 150 ISS 25
FILE LAST UPDATED: 15 Jun 2009 (20090615/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2009

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> 13
L4          45 L3
```

```
=> d ibib abs hitstr 1-45
```

```
L4 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:555826 CAPLUS
DOCUMENT NUMBER: 150:526744
TITLE: Complexes with tridentate ligands
INVENTOR(S): Walters, Robert W.; Tsai, Jui-Yi; MacKenzie, Peter
Borden; Beers, Scott
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 143pp., Cont.-in-part of U.S.
Ser. No. 973,265.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:
```

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

| | | | | |
|---|----|----------|-----------------|----------|
| US 20090115322 | A1 | 20090507 | US 2008-240584 | 20080929 |
| US 20090092854 | A1 | 20090409 | US 2007-973265 | 20071004 |
| WO 2009046266 | A1 | 20090409 | WO 2008-US78697 | 20081003 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

PRIORITY APPLN. INFO.:

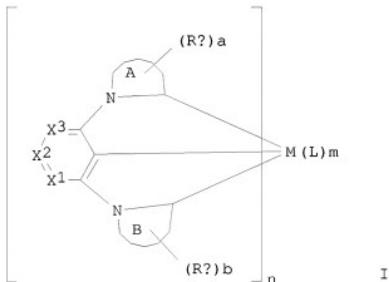
US 2007-973265

A2 20071004

US 2008-240584

A 20080929

GI

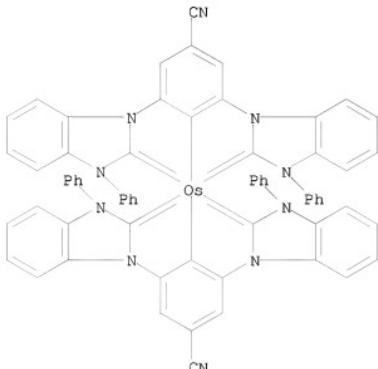


AB The present invention relates to organic light emitting devices (OLEDs), and more specifically to phosphorescent organic materials used in such devices. More specifically, the present invention relates to emissive phosphorescent material I [M = 2nd or 3rd row transition metal; L -ancillary ligand; ring A = 8- to 12-membered bicyclic ring having 3 - 6 heteratoms, 11- to 18-membered tricyclic having 3 - 6 heteratoms, 11- to 14-membered fused tricyclic, or 14- to 18-membered fused tetracyclic; RA = alkyl, alkenyl, alkynyl, aralkyl, O-R', N(R')₂, SR', C(O)R', C(O)NR', CN, CF₃, NO₂, SO₂R', SOR', SO₃R', Si(R'')₃, halo, aryl or heteroaryl; a = 0 - 4; ring B = 5- or 6-membered ring, 8- to 12-nmembred bicyclic, 11- to 18-membered tricyclic, 11- to 18-membered fused tricyclic, or 14- to 18-membered fused tetracyclic] which comprise at least one tridentate ligand bound to a metal center, wherein at least one of the bonds to the tridentate ligand is a C-metal bond.

IT 1141494-94-1P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(complexes with tridentate ligands)
 RN 1141494-94-1 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



L4 ANSWER 2 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2009:487913 CAPLUS

DOCUMENT NUMBER: 150:472908
 TITLE:

Transition metal cyclometalated complexes with chelating bidentate N-heterocyclic carbene-heterocycle ligands as light-emitting materials for organic light-emitting devices (OLEDs)

INVENTOR(S): Molt, Oliver; Lennartz, Christian; Fuchs, Evelyn;
 Kahle, Klaus; Langer, Nicolle; Schildknecht,
 Christian; Rudolph, Jens; Wagenblast, Gerhard;
 Watanabe, Soichi

PATENT ASSIGNEE(S): Basf Se, Germany
 SOURCE: PCT Int. Appl., 70pp.

DOCUMENT TYPE: Patent
 LANGUAGE: German

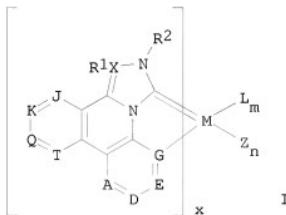
FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2009050281 | A1 | 20090423 | WO 2008-EP64064 | 20081017 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, | | | | |

TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
 IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
 TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: EP 2007-118675 A 20071017
 EP 2008-153303 A 20080326

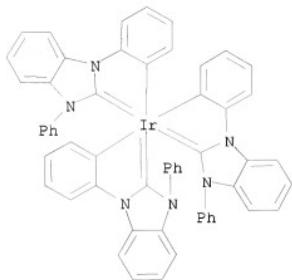
OTHER SOURCE(S): MARPAT 150:472908
 GI



AB Transition metal complexes I [1, (NHC)MLmZn, M = Group IB, IIB metal, transition metal, lanthanide, preferably M = Ir, Os, Pt; L = mono- or bidentate neutral ligand; Z = mono- or dianionic ligand; X = C, N, preferably X = N, R1 absent; when X = C, R1 = F, CN, Cl-20 alkoxy, alkylthio, C6-30 aryloxy, arylthio, C6-30 (hetero)aryl; R2 = organyl, A, D, E, G, J, K, Q, T = N, CH, C-organyl, two adjacent ring atoms may form a 3-6-membered cycle; x > 1; m, n = 0, ≥1], useful as stable and efficient light-emitting materials for manufacturing of organic light-emitting devices, were prepared by metalation of the azolium carbene precursors [NHC-H]+Y- (2·Y, same A, D, E, G, J, K, Q, T, R1, R2; Y = halide, pseudohalide, C6-30 aryloxy, arylthio, C6-30 (hetero)aryl, BF4-, BPh2-, PF6-, AsF6-, SbF6-), preferably in one-pot process with a metal complex and ligands L and HZ, preferably by reaction of [NHC-H]+Y- with [Ir2(μ-Cl)2(n4-1,5-cod)2]. In an example, 11.0 mmol of the ligand iodide precursor, 1-methyl-1,2,4-triazolo[4,3-f]phenanthridinium iodide (2a·I; X = N, R1 absent, R2 = Me, A = D = E = G = J = K = Q = T = CH) was reacted with 5.5 mmol of Ag2O in 200 mL of MeOH for 16 h at 20° under argon, giving 94% of the silver carbene (NHC)AgI (3a), which was reacted with [Ir2(μ-Cl)2(n4-1,5-cod)2] to give the mer-(NHC)3Ir (1a, X = N, R1 absent, R2 = Me, A = D = E = J = K = Q = T = CH, G = C; x = 3, m = n = 0) with 75% yield. In another example, the complex 1a exhibited blue emission at 448, 481 nm upon excitation at 325 nm by HeCd laser, the light-emitting layer made with 1a as an active component exhibited electroluminescence at 452, 479 nm, efficiency of 13.4 cd/A, quantum yield of 7.2% and maximum brightness of 1300 cd/m².

IT 888725-36-8
 RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (preparation and electroluminescence of iridium cyclometalated annelated azolylidene N-heterocyclic carbene chelate complexes, light-emitting

layers and devices)
 RN 888725-36-8 CAPLUS
 CN Iridium, tris(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-
 (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2009:422572 CAPLUS
 DOCUMENT NUMBER: 150:434745
 TITLE: A light emitting device using a phosphor comprising complexes with tridentate ligands
 INVENTOR(S): Walters, Robert W.; Tsai, Jui-Yi; MacKenzie, Peter Borden; Beers, Scott
 PATENT ASSIGNEE(S): Entire Interest, USA
 SOURCE: U.S. Pat. Appl. Publ., 134pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| US 20090092854 | A1 | 20090409 | US 2007-973265 | 20071004 |
| US 20090115322 | A1 | 20090507 | US 2008-240584 | 20080929 |
| WO 2009046266 | A1 | 20090409 | WO 2008-US78697 | 20081003 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, | | | | |

TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2007-973265 A2 20071004
US 2008-240584 A 20080929

AB A light emitting device using a phosphor comprising complexes with tridentate ligands is described, where the emissive phosphorescent material comprises at least one tridentate ligand bound to a metal center, and where at least one of the bonds to the tridentate ligand is a carbon-metal bond.

IT 1141494-61-2 1141494-83-8 1141494-84-9
1141494-94-1

RL: TEM (Technical or engineered material use); USES (Uses)
(light emitting devices using phosphor comprising complexes with tridentate ligands)

RN 1141494-61-2 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 1141494-83-8 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

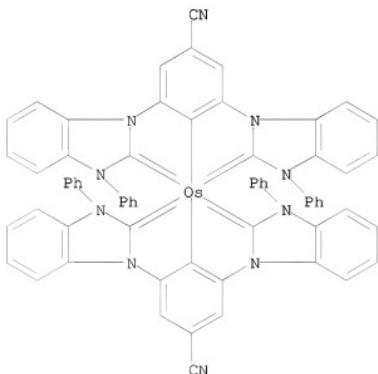
RN 1141494-84-9 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 1141494-94-1 CAPLUS

CN INDEX NAME NOT YET ASSIGNED



L4 ANSWER 4 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:422571 CAPLUS
DOCUMENT NUMBER: 150:434744

TITLE: A light emitting device using a phosphor comprising complexes with tridentate ligands
INVENTOR(S): Walters, Robert W.; Tsai, Jui-Yi; MacKenzie, Peter Borden; Beers, Scott A.
PATENT ASSIGNEE(S): Universal Display Corporation, USA
SOURCE: PCT Int. Appl., 187pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|----------|-----------------|------------|
| WO 2009046266 | A1 | 20090409 | WO 2008-US78697 | 20081003 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| US 20090092854 | A1 | 20090409 | US 2007-973265 | 20071004 |
| US 20090115322 | A1 | 20090507 | US 2008-240584 | 20080529 |
| PRIORITY APPLN. INFO.: | | | US 2007-973265 | A 20071004 |
| | | | US 2008-240584 | A 20080929 |

AB A light emitting device using a phosphor comprising complexes with tridentate ligands is described, where the emissive phosphorescent material comprises at least one tridentate ligand bound to a metal center, and where at least one of the bonds to the tridentate ligand is a carbon-metal bond.

IT 1141494-61-2 1141494-83-8 1141494-84-9

1141494-94-1

RL: TEM (Technical or engineered material use); USES (Uses)
(light emitting devices using phosphor comprising complexes with tridentate ligands)

RN 1141494-61-2 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 1141494-83-8 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

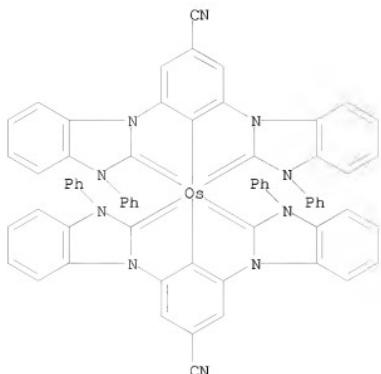
RN 1141494-84-9 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 1141494-94-1 CAPLUS

CN INDEX NAME NOT YET ASSIGNED



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:418723 CAPLUS

DOCUMENT NUMBER: 150:409823

TITLE: Organic electroluminescence devices having prescribed light-emitting layers and carbene compound layers

INVENTOR(S): Sato, Yu; Kinoshita, Masaji; Tobiyo, Manabu

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 124pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

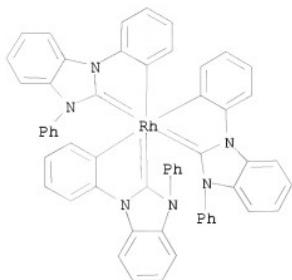
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| JP 2009076509 | A | 20090409 | JP 2007-241625 | 20070918 |
| PRIORITY APPLN. INFO.: | | | JP 2007-241625 | 20070918 |
| AB The devices have carbene compound-containing layers between light-emitting (LE) layers and anodes (preferably adjacent to the LE layers) for reduced drive voltage and improved electroluminescent efficiency. The LE layers contain ≥ 1 hole transport material (A) and ≥ 1 electron transport material (B), where A and/or B are light-emitting materials, and the concentration of B decreases from cathodes toward anodes. | | | | |
| IT 913611-59-3
RL: TEM (Technical or engineered material use); USES (Uses)
(hole transport layer; organic EL devices having predetd. light-emitting layers and carbene compound layers for reduced drive voltage and improved electroluminescent efficiency) | | | | |
| RN 913611-59-3 CAPLUS | | | | |
| CN Rhodium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- | | | | |

, (OC-6-22)- (CA INDEX NAME)



L4 ANSWER 6 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2009:332832 CAPLUS
 DOCUMENT NUMBER: 150:362860
 TITLE: Metal complexes, organic electroluminescent elements containing them with high emission efficiency and durability, and displays and illumination apparatus using them
 INVENTOR(S): Ikemizu, Hiroshi; Nishizeki, Masato; Oshiyama, Tomohiro; Kato, Eisaku; Kita, Hiroshi
 PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 98pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 2009057505 | A | 20090319 | JP 2007-227500 | 20070903 |
| PRIORITY APPLN. INFO.: | | | JP 2007-227500 | 20070903 |
| GI | | | | |



AB The metal complexes are depicted as I ($R_1 = H$, substituent; $n_1 = 1-4$; $R_4 =$ cyclic hydrocarbon group, heterocyclic group; $Z_1 = 5-$ or 6-membered cyclic or heterocyclic group; $A = CR_2$, N ; $R_2 = H$, substituent; $B = CR_3$, N ; $R_3 = H$, substituent; $X_1L_1X_2 =$ bidentate ligand; $X_{1,2} = H$, N , O ; $L_1 =$ atomic group; $m_1 = 1-3$; $m_2 = 0-2$; $m_1 + m_2 = 2$, 3 ; $M_1 =$ Group 8-10 metal), thus giving LED with high color purity and low power consumption.

IT 1133240-84-2P

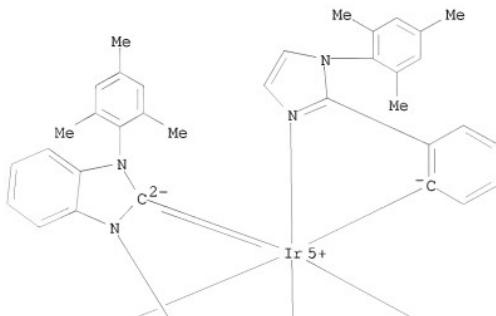
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(dopant; metal complexes for organic LED with high emission efficiency and durability)

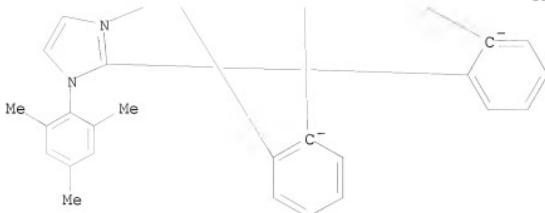
RN 1133240-84-2 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A



PAGE 2-A



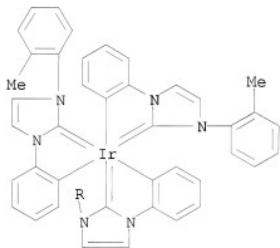
IT 1133240-83-1 1133240-85-3 1133240-88-6

1133240-89-7 1133240-90-0

RL: TEM (Technical or engineered material use); USES (Uses)
(dopant; metal complexes for organic LED with high emission efficiency and
durability)

RN 1133240-83-1 CAPLUS

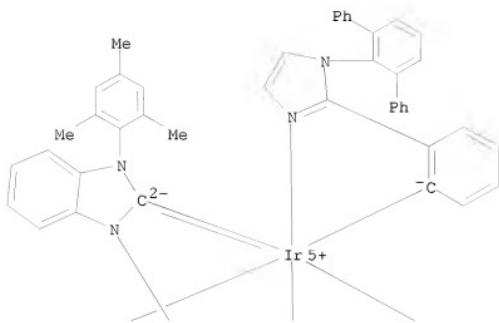
CN INDEX NAME NOT YET ASSIGNED



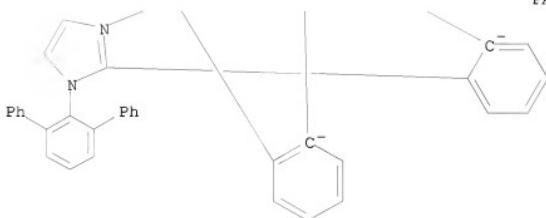
RN 1133240-85-3 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

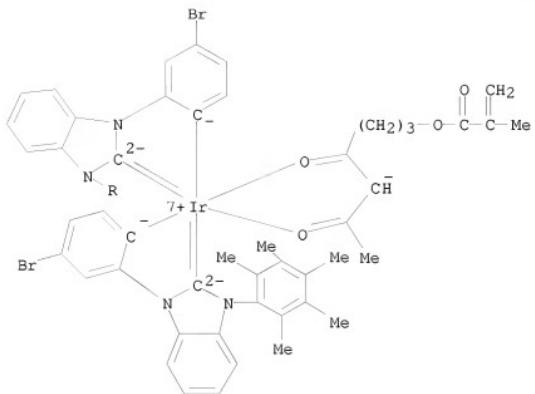


PAGE 2-A

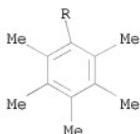


RN 1133240-88-6 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

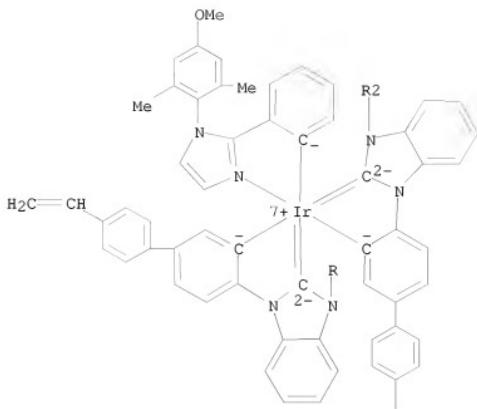


PAGE 2-A

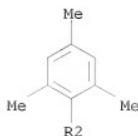
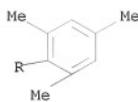


RN 1133240-89-7 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

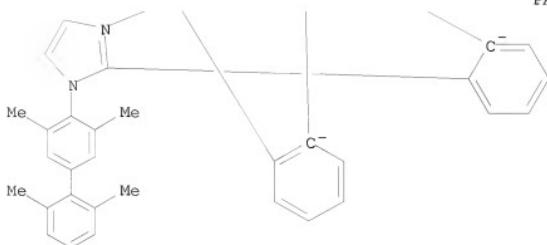
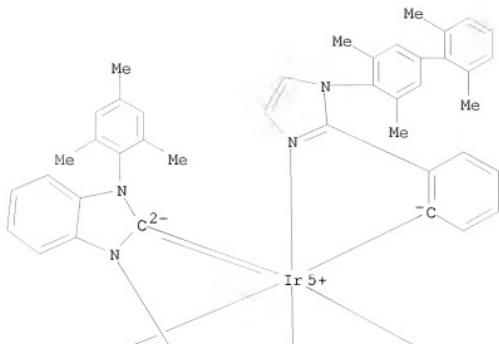
PAGE 1-A



PAGE 2-A



RN 1133240-90-0 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



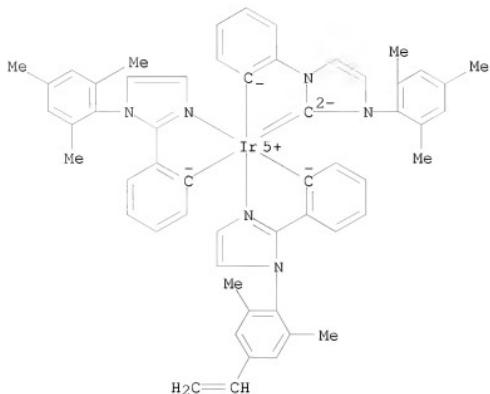
IT 1133240-94-4 1133240-97-7 1133241-00-5
 1133241-03-8 1133241-06-1 1133241-12-9
 1133241-16-3 1133241-19-6 1133241-21-0
 1133241-23-2

RL: TEM (Technical or engineered material use); USES (Uses)
 (emission layer; metal complexes for organic LED with high emission
 efficiency and durability)

RN 1133240-94-4 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

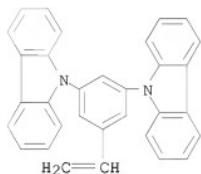
CM 1

CRN 1133240-93-3
CMF C55 H51 Ir N6
CCI CCS



CM 2

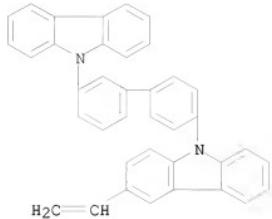
CRN 953414-49-8
CMF C32 H22 N2



RN 1133240-97-7 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

CM 1

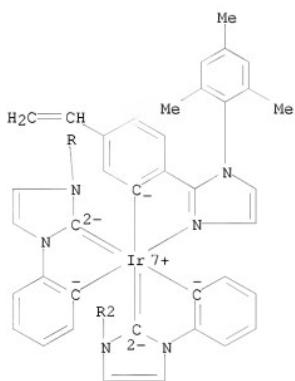
CRN 1133240-96-6
CMF C38 H26 N2



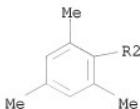
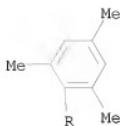
CM 2

CRN 1133240-95-5
CMF C56 H53 Ir N6
CCI CCS

PAGE 1-A



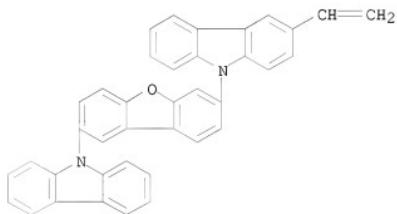
PAGE 2-A



RN 1133241-00-5 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

CM 1

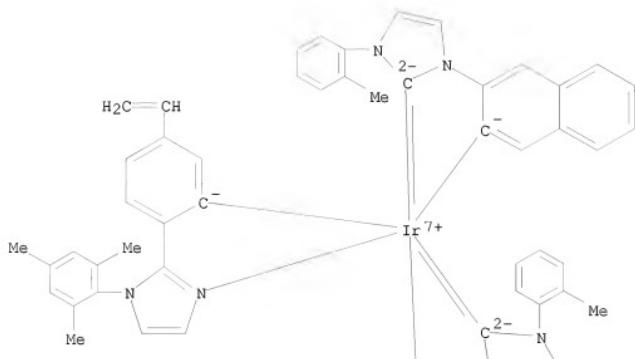
CRN 1133240-99-9
CMF C38 H24 N2 O



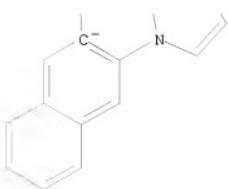
CM 2

CRN 1133240-98-8
CMF C60 H49 Ir N6
CCI CCS

PAGE 1-A



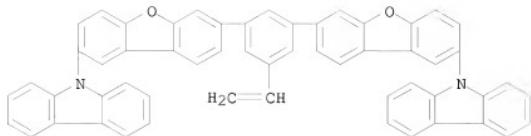
PAGE 2-A



RN 1133241-03-8 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

CM 1

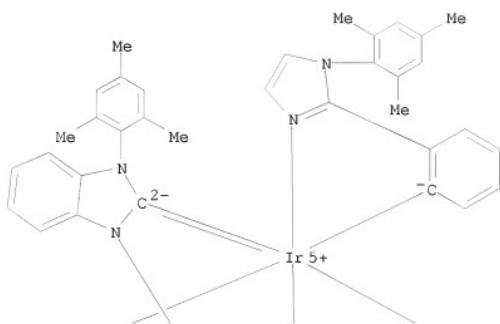
CRN 1133241-02-7
CMF C56 H34 N2 O2



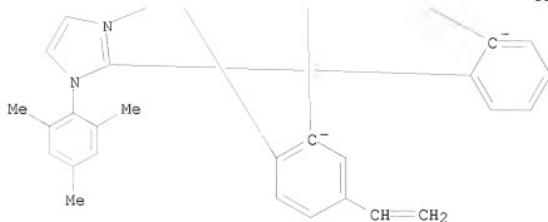
CM 2

CRN 1133241-01-6
CMF C60 H55 Ir N6
CCI CCS

PAGE 1-A



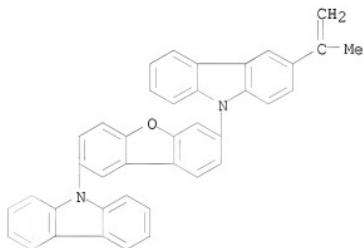
PAGE 2-A



RN 1133241-06-1 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

CM 1

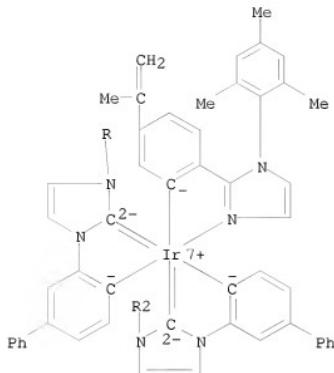
CRN 1133241-05-0
CMF C39 H26 N2 O



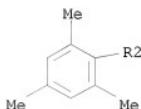
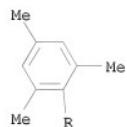
CM 2

CRN 1133241-04-9
CMF C69 H63 Ir N6
CCI CCS

PAGE 1-A



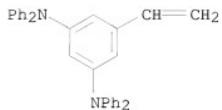
PAGE 2-A



RN 1133241-12-9 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

CM 1

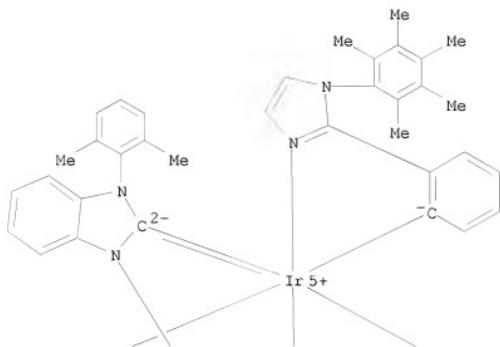
CRN 1133241-11-8
CMF C32 H26 N2



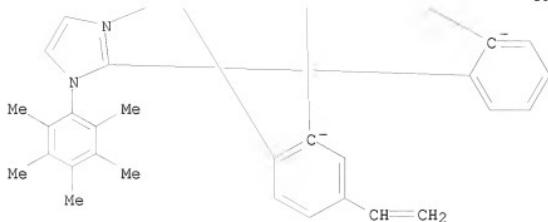
CM 2

CRN 1133241-10-7
CMF C63 H61 Ir N6
CCI CCS

PAGE 1-A



PAGE 2-A

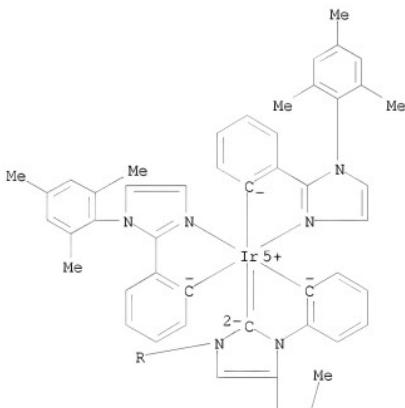


RN 1133241-16-3 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

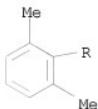
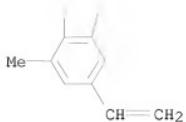
CM 1

CRN 1133241-15-2
CMF C63 H59 Ir N6
CCI CCS

PAGE 1-A

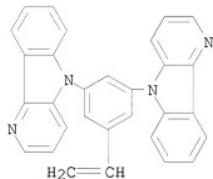


PAGE 2-A



CM 2

CRN 934972-67-5
CMF C30 H20 N4

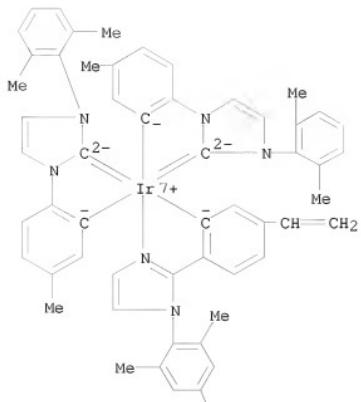


RN 1133241-19-6 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 1133241-18-5
CMF C56 H53 Ir N6
CCI CCS

PAGE 1-A

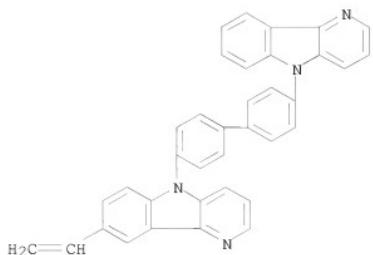


PAGE 2-A



CM 2

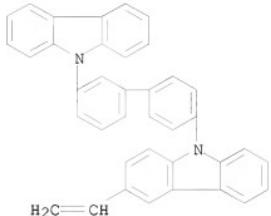
CRN 1133241-17-4
CMF C36 H24 N4



10568344b.trn

CM 3

CRN 1133240-96-6
CMF C38 H26 N2

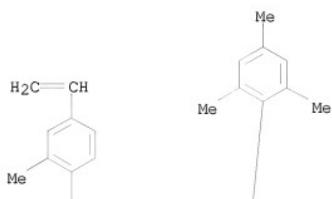


RN 1133241-21-0 CAPLUS
CN Iridium, bis([1,1'-biphenyl]-3,4-diyl[3-(2,4,6-trimethylphenyl)-1H-benzimidazol-1-yl-2(3H)-ylidene])[4-[1-(4-ethenyl-2-methylphenyl)-1H-imidazol-2-yl- κ N3][1,1'-biphenyl]-3-yl- κ C]-, polymer with 9,9'-(5-ethenyl-1,3-phenylene)bis[9H-carbazole] (CA INDEX NAME)

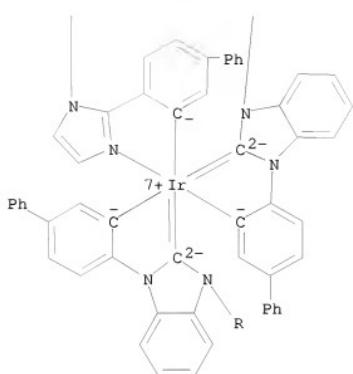
CM 1

CRN 1133241-20-9
CMF C80 H65 Ir N6
CCI CCS

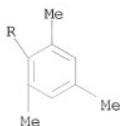
PAGE 1-A



PAGE 2-A

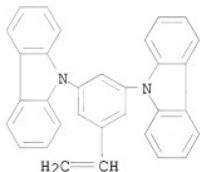


PAGE 3-A



CM 2

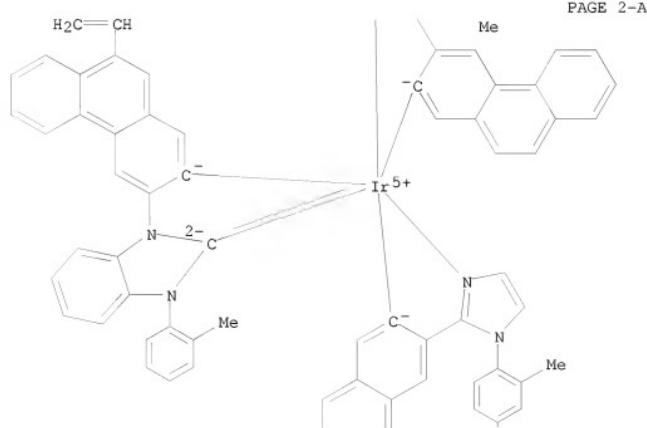
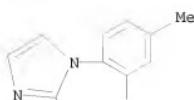
CRN 953414-49-8
CMF C32 H22 N2



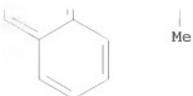
RN 1133241-23-2 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

CM 1

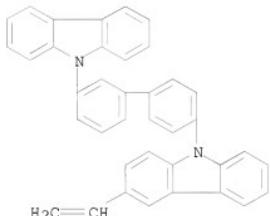
CRN 1133241-22-1
CMF C80 H59 Ir N6
CCI CCS



PAGE 3-A



CM 2

CRN 1133240-96-6
CMF C38 H26 N2

L4 ANSWER 7 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009195407 CAPLUS

DOCUMENT NUMBER: 150:329946

TITLE: Reactivity of $[\text{Ru}_4(\mu-\text{H})_4(\text{CO})_{12}]$ with N-heterocyclic carbenes

AUTHOR(S): Cabeza, Javier A.; del Rio, Ignacio; Fernandez-Colinas, Jose M.; Perez-Carreno, Enrique;

Sanchez-Vega, M. Gabriela; Vazquez-Garcia, Digna

CORPORATE SOURCE: Departamento de Quimica Organica e Inorganica-IUQOEM, Universidad de Oviedo-CSIC, Oviedo, E-33071, Spain

SOURCE: Organometallics, 28(6), 1832-1837
CODEN: ORGND7; ISSN: 0276-7333

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The tetraruthenium tetrahydrido cluster compound $[\text{Ru}_4(\mu-\text{H})_4(\text{CO})_{12}]$ (1) reacts at room temperature with N-heterocyclic imidazolylidene carbenes $[\text{Ru}_4(\mu-\text{H})_4(\text{CO})_{11}(\text{R}_1\text{R}_2\text{Im})]$ (2-5; $\text{R}_1, \text{R}_2:\text{Me, Me; Ph, Me; Ph, Ph; mesityl, mesityl}$). In solution, compds. 2-5 are fluxional in the NMR time scale and display the same pattern of $\nu(\text{CO})$ IR absorptions. DFT calcns. have shown that the Cs arrangement of the Ru_4H_4 cluster core of these clusters is 0.2-1.7 kcal mol⁻¹ more stable than the D2d cluster core, the smallest difference corresponding to the clusters with the very bulky 1,3-dimesitylimidazolin-2-ylidene ligand. Two conformers with Cs Ru_4H_4

cluster core have been found by x-ray crystallog. in the crystals of compound 3. The thermal stability of compds. 2-5 has also been studied. While the di-Me derivative 2 is stable in refluxing toluene for 3 h, the dimesityl derivative 5 slowly decompns. in solution at room temperature Two isostructural heptanuclear derivs., [Ru₇(μ₃-H)(μ₄-CO)(μ-CO)₂(CO)₁₄{μ-(η₁-η₆-C₆H₄)RIm}] (6, 7; R = Me, Ph), which contain a quadruply bridging CO ligand and an orthometalated Ph ring that is addnl. coordinated as an η₆-arene ligand, are the major products of the thermolysis of compds. 3 and 4 in toluene at reflux temperature

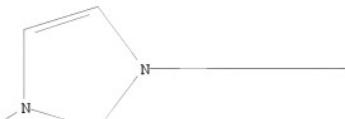
IT 1132683-47-6P

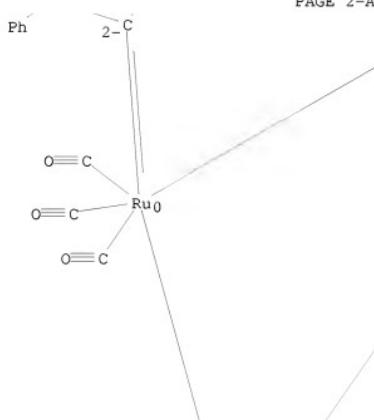
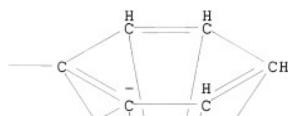
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, structure and stability of tetra- and heptaruthenium cluster
2-imidazolylidene carbonyl tetrahydride carbene complexes)

RN 1132683-47-6 CAPLUS

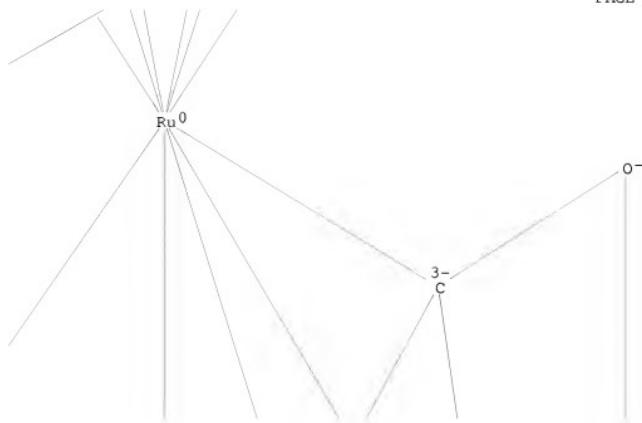
CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

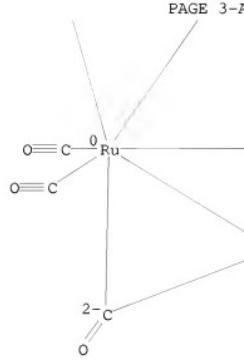


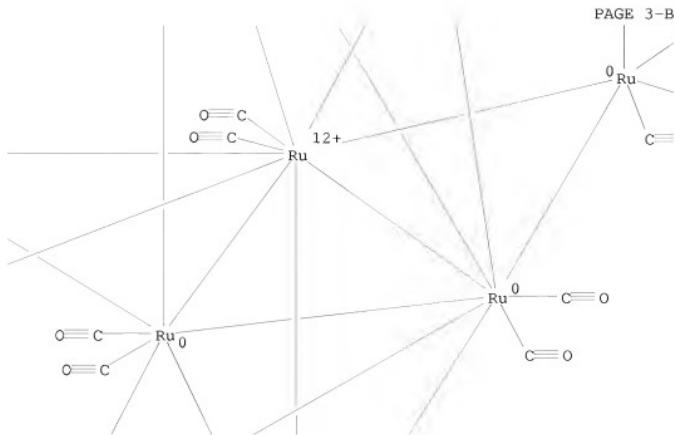


PAGE 2-B



PAGE 3-A





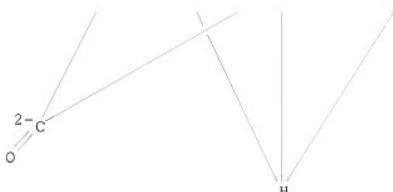
PAGE 3-C

C≡O

~C≡O

≡O

PAGE 4-B



REFERENCE COUNT:

46

THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009116764 CAPLUS
DOCUMENT NUMBER: 150179607
TITLE: Organic electroluminescent element with high light-emission efficiency and excellent durability employing multiple hole-transporting light-emitting materials with graded compositions
INVENTOR(S): Okada, Hisashi; Tobise, Manabu; Kinoshita, Masaru
PATENT ASSIGNEE(S): Japan
SOURCE: U.S. Pat. Appl. Publ., 29pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| US 20090026940 | A1 | 20090129 | US 2008-178457 | 20080723 |
| JP 2009032987 | A | 20090212 | JP 2007-196673 | 20070727 |

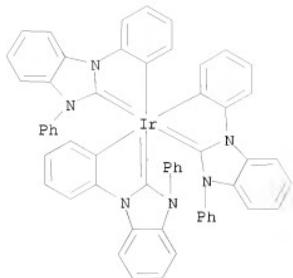
PRIORITY APPLN. INFO.: JP 2007-196673 A 20070727

AB An organic electroluminescent element is discussed including an organic layer including at least a light-emitting layer between a pair of electrodes, where the light-emitting layer comprises at least two hole transporting materials and an electron transporting host material, with at least one of the hole transporting materials being a hole transporting light-emitting material, and a total concentration of the at least two hole transporting materials in the light-emitting layer decreases from an anode side toward a cathode side.

IT 888725-36-8
RL: TEM (Technical or engineered material use); USES (Uses)
(light-emitting layer containing; organic electroluminescent element with high light-emission efficiency and excellent durability employing multiple hole-transporting light-emitting materials with graded compns.)

RN 888725-36-8 CAPLUS

CN Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



L4 ANSWER 9 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:116719 CAPLUS

DOCUMENT NUMBER: 150:155945

TITLE: Organic electroluminescent elements employing a hole transporting light-emitting material with a graded concentration

INVENTOR(S): Okada, Hisashi; Tobise, Manabu; Kinoshita, Masaru

PATENT ASSIGNEE(S): Japan

SOURCE: U.S. Pat. Appl. Publ., 27pp.

CODEN: USXECO

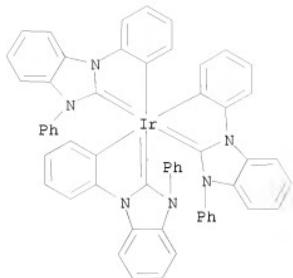
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|----------|-----------------|------------|
| US 20090026938 | A1 | 20090129 | US 2008-178445 | 20080723 |
| JP 2009032990 | A | 20090212 | JP 2007-196676 | 20070727 |
| PRIORITY APPLN. INFO.: | | | JP 2007-196676 | A 20070727 |
| AB | Organic electroluminescent elements are described including an organic layer including a light-emitting layer disposed between a pair of electrodes, where the light-emitting layer contains at least one hole transporting light-emitting material and at least one electron-transporting host material, and a concentration of the hole transporting light-emitting material in | | | |
| | the light-emitting layer decreases from an anode side toward a cathode side. | | | |
| IT | 888725-36-8
RL: TEM (Technical or engineered material use); USES (Uses)
(hole-transporting phosphorescent material; organic electroluminescent elements employing hole transporting light-emitting material with graded concentration) | | | |
| RN | 888725-36-8 CAPLUS | | | |
| CN | Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME) | | | |



L4 ANSWER 10 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:114549 CAPLUS

DOCUMENT NUMBER: 150:179594

TITLE: Organic electroluminescence (EL) devices with high luminous efficiency and suppressed dark spot, and display devices and lamps having them

INVENTOR(S): Yasukawa, Noriko; Kato, Eisaku

PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 105pp.

CODEN: JKXXAF

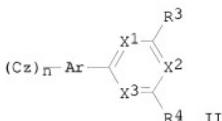
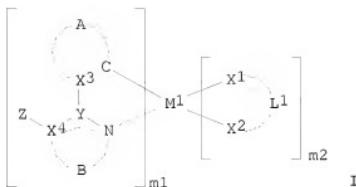
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|----------|
| ----- | ---- | ----- | ----- | ----- |
| JP 2009021336 | A | 20090129 | JP 2007-182063 | 20070711 |
| PRIORITY APPLN. INFO.: | | | JP 2007-182063 | 20070711 |
| OTHER SOURCE(S): | MARPAT | 150:179594 | | |
| GI | | | | |



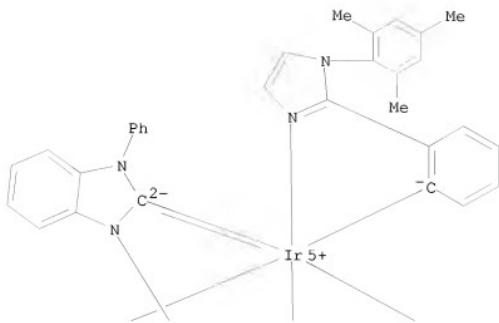
AB The EL devices include anodes, luminescent layers containing host compds. and metal complexes, electron transport layers, and cathodes, wherein the luminescent layers contain metal complexes of I ($X_4 = N, C; Z =$ hydrocarbon ring, heterocyclic ring; $X_3, Y = C, N; A =$ atomic groups forming 5 to 6-membered hydrocarbon or heterocyclic ring with X_3C ; $B = CR_1:CR_2, N:CR_2, CR_1:N, N:N; R_1, R_2 = H$, substituent; $X_1X_2 =$ bidentate ligand; $X_1, X_2 = C, N, O; L_1 =$ atomic group forming bidentate ligand with X_1 and X_2 ; $m_1 = 1, 2, 3; m_2 = 0, 1, 2; m_1 + m_2 = 2, 3; M_1 =$ Group VIII metal), and the electron transport layers contain II [$n = 1, 2$; $Ar =$ arylene, heteroarylene; $R_3, R_4 = H$, aryl; $X_1-3 = :CR, :N$; at least one of X_1-3 is $:N$; $R = H$, substituent; $Cz =$ (un)substituted carbazolyl]. The devices can prevent crystallization of organic layers.

IT 1100761-23-6

RL: TEM (Technical or engineered material use); **USES** (Uses)
(dopant, luminescent layer; organic EL devices with high luminous efficiency and suppressed dark spot for display devices and lamps)

RN 1100761-23-6 CAPLUS

CN Iridium, [(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-[1-(2,4,6-trimethylphenyl)-1H-imidazol-2-yl- κN_3]phenyl- κC] - (CA INDEX NAME)



L4 ANSWER 11 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:114548 CAPLUS

DOCUMENT NUMBER: 150:179593

TITLE: Organic electroluminescent (EL) devices with high luminous efficiency and suppressed dark spot, and display devices and lamps having them

INVENTOR(S): Yasukawa, Noriko; Kato, Eisaku

PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan

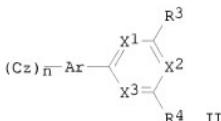
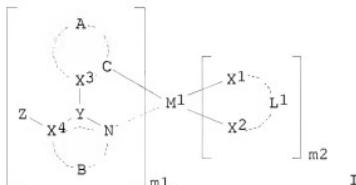
SOURCE: Jpn. Kokai Tokkyo Koho, 98pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

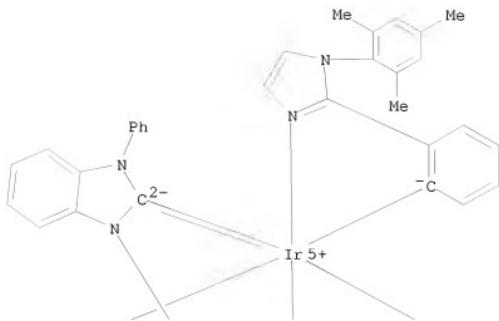
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|----------|
| JP 2009021335 | A | 20090129 | JP 2007-182062 | 20070711 |
| PRIORITY APPLN. INFO.: | | | JP 2007-182062 | 20070711 |
| OTHER SOURCE(S): | MARPAT | 150:179593 | | |
| GI | | | | |



AB The EL devices include anodes, luminescent layers containing host compds. and metal complexes, and cathodes, wherein the luminescent layers contain metal complexes of I ($X_4 = N, C$; $Z =$ hydrocarbon ring, heterocyclic ring; $X_3, Y = C, N$; $A =$ atomic groups forming 5 to 6-membered hydrocarbon or heterocyclic ring with X_3C ; $B = CR_1:CR_2, N:CR_2, CR_1:N, N:N$; $R_1, R_2 = H$, substituent; $X_1L_1X_2 =$ bidentate ligand; $X_1, X_2 = C, N, O$; $L_1 =$ atomic group forming bidentate ligand with X_1 and X_2 ; $m_1 = 1, 2, 3$; $m_2 = 0, 1, 2$; $ml + m_2 = 2, 3$; $M_1 =$ Group VIII metal) and $\text{Ar}_1\text{Ar}_5\text{N}-\text{p-C}_6\text{H}_4-\text{xRxx-Nar}_2\text{Nar}_1\text{Ar}_3(\text{p-C}_6\text{H}_4-\text{yRyy})\text{nNar}_6\text{Ar}_7$ ($\text{Ar}_1 =$ aryl; $\text{Ar}_2, \text{Ar}_3 =$ arylene; $\text{Ar}_4-7 =$ aryl; $R_x, R_y =$ substituent; $x, y = 0-4$; $m, n = 0-3$; Ar_2 and Ar_3 , Ar_4 and Ar_5 , and/or Ar_6 and Ar_7 are connected through direct bonding, O, S, or alkylene). The metal complexes (dopants) and host compds. will not interact with each other, thus cause no crystallization in organic layers.

IT 1100761-23-6
 RL: TEM (Technical or engineered material use); USES (Uses)
 (dopant; organic EL devices with high luminous efficiency and suppressed dark spot for displays and lamps)
 RN 1100761-23-6 CAPLUS
 CN Iridium, [(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-[1-(2,4,6-trimethylphenyl)-1H-imidazol-2-yl-κN3]phenyl-κC]- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L4 ANSWER 12 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:86345 CAPLUS

DOCUMENT NUMBER: 150:155890

TITLE: Organic electroluminescence device showing improved light efficiency, luminescence lifetime, uniform brightness, and suppressed dark spot formation, and its use in display and illumination apparatus

INVENTOR(S): Yasukawa, Noriko; Kato, Eisaku

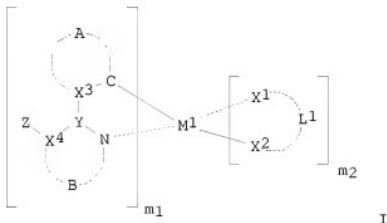
PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 112pp.

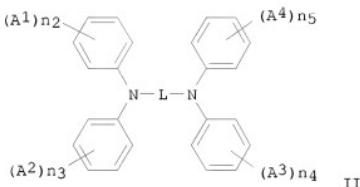
CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 2009016719 | A | 20090122 | JP 2007-179521 | 20070709 |
| PRIORITY APPLN. INFO.: | | | JP 2007-179521 | 20070709 |

GI



I



II

AB The title organic electroluminescence device contains a metal complex compound represented by I [X1, X2 = C, N, O; X3 = C, N; X3, X4, Y = C, N; Z = hydrocarbon ring, heterocycle ring; A = atom group for forming 5- to 6-member hydrocarbon or heterocycle ring; B = -C(R01):C(R02)-, -N:C(R02)-, -C(R01):N-, -N:N-; R01, R02 = H, substituent; L1 = atom group for forming ligand; m1 = 1, 2, 3; m2 = 0, 1, 2; m1+m2 = 2 or 3; M1 = group 8 to 10 metal] in an electroluminescence layer and a compound represented by II [A1-4 = substituent; L = Ar5-(-L2-Ar6-)n1; Ar5, Ar6 = arylene; L2 = single bond, connection group; n1 = 0, 1; n2, n3, n4, n5 = 0-5] in a pos. hole transport layer.

IT 1100761-23-6

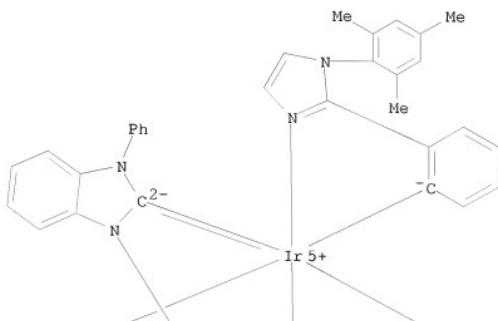
RL: MOA (Modifier or additive use); USES (Uses)
 (electroluminescence dopant material; organic electroluminescence device

showing improved light efficiency, luminescence lifetime, uniform brightness, and suppressed dark spot formation, and its use in display and illumination apparatus)

RN 1100761-23-6 CAPLUS

CN Iridium, [(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-[1-(2,4,6-trimethylphenyl)-1H-imidazol-2-yl- κ N3]phenyl- κ C]- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



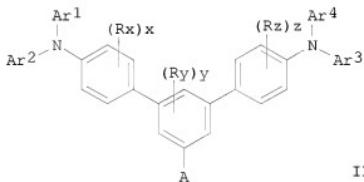
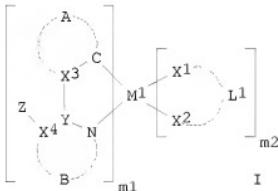
L4 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:86314 CAPLUS
DOCUMENT NUMBER: 150:155889

10568344b.trn

TITLE: Organic electroluminescence device showing high light efficiency, long luminous lifetime, improved storage stability, and suppressed dark spot formation, and its use in display apparatus and illumination apparatus
 INVENTOR(S): Yasukawa, Noriko; Kato, Eisaku
 PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 89pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 2009016718 | A | 20090122 | JP 2007-179520 | 20070709 |
| PRIORITY APPLN. INFO.: | | | JP 2007-179520 | 20070709 |

GI



AB The title organic electroluminescence device contains a metal complex compound represented by I [X1, X2 = C, N, O; X3 = C, N; X4, Y = C, N; Z = hydrocarbon ring, heterocycle ring; A = atom group for forming 5- to 6-member hydrocarbon or heterocycle ring; B = -C(R01):C(R02)-, -N:C(R02)-, -C(R01):N-, -N:N-; R01, R02 = H, substituent; L1 = atom group form forming ligand; m1 = 1, 2, 3; m2 = 0, 1, 2; m1+m2 = 2 or 3; M1 = group 8 to 10 metal] and a compound represented by II [A = alkyl, alkoxy, aryl, heteroaryl; Ar1-4 = aryl; Rx, Ry, Rz = substituent; x, z = 0-4; y = 0-3]

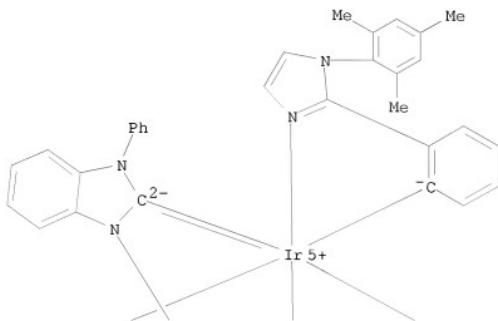
in an electroluminescence layer.
IT 1100761-23-6

RL: MOA (Modifier or additive use); USES (Uses)
(electroluminescence dopant material; organic electroluminescence device
showing high light efficiency, long luminous lifetime, improved storage
stability, and suppressed dark spot formation, and its use in display
apparatus and illumination apparatus)

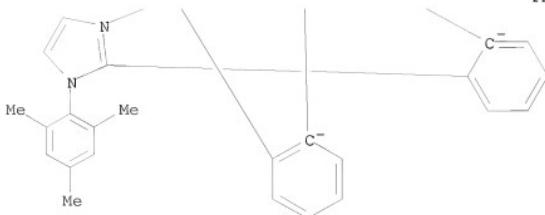
RN 1100761-23-6 CAPLUS

CN Iridium, [(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-
phenylene]bis[2-[1-(2,4,6-trimethylphenyl)-1H-imidazol-2-yl-
κN3]phenyl-κCl- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L4 ANSWER 14 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2009:20278 CAPLUS
 DOCUMENT NUMBER: 150:132601
 TITLE: Organic light-emitting diodes comprising at least one disilyl compound selected from disilylcarbazoles, disilyldibenzofurans, disilyldibenzothiophenes, disilyldibenzophospholes, disilyldibenzothiophene S-oxides and disilyldibenzothiophene S,S-dioxides
 INVENTOR(S): Langer, Nicolle; Kahle, Klaus; Lennartz, Christian; Molt, Oliver; Fuchs, Evelyn; Rudolph, Jens; Schildknecht, Christian; Watanabe, Soichi; Wagenblast, Gerhard
 PATENT ASSIGNEE(S): BASF SE, Germany
 SOURCE: PCT Int. Appl., 102pp.
 CODEN: PIXKD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

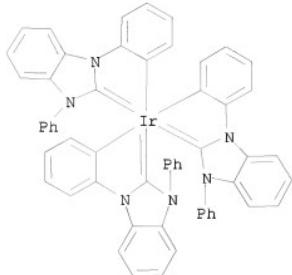
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|----------------------------------|--------------------------|
| WO 2009003919 | A1 | 20090108 | WO 2008-EP58207 | 20080626 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| PRIORITY APPLN. INFO.: | | | EP 2007-111824
EP 2008-153306 | A 20070705
A 20080326 |

AB Organic light-emitting diodes comprising an anode and a cathode and a light-emitting layer arranged between the anode and the cathode, and optionally ≥ 1 addnl. layer are described in which the light-emitting layer and/or the addnl. layer(s) comprises ≥ 1 compound selected from disilylcarbazoles, disilyldibenzofurans, disilyldibenzothiophenes, disilyldibenzophospholes, disilyldibenzothiophene S-oxides, and disilyldibenzothiophene S,S-dioxides. Light-emitting layers comprising ≥ 1 of the aforementioned compds., the use of the compds. as matrix materials, hole/exciton blocker materials, electron/exciton blocker materials, hole injection materials, electron injection materials, hole conductor materials and/or electron conductor materials, and devices selected from the group consisting of stationary visual display units, mobile visual units and illumination units comprising ≥ 1 of the organic light-emitting diodes are also described.

IT 888725-36-8

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (organic light-emitting diodes comprising at least one disilyl compound)

RN 888725-36-8 CAPLUS
 CN Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-
 (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:1502745 CAPLUS
 DOCUMENT NUMBER: 150:67325
 TITLE: Organic electroluminescent elements and electroluminescent materials
 INVENTOR(S): Fujimura, Osamu; Fukunaga, Kenji; Honma, Takashi;
 Machida, Toshikazu
 PATENT ASSIGNEE(S): UBE Industries, Ltd., Japan
 SOURCE: PCT Int. Appl., 46pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2008153088 | A1 | 20081218 | WO 2008-JP60734 | 20080612 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
TR, BE, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG, BW, GH, GE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| PRIORITY APPLN. INFO.: | | | JP 2007-156265 | A 20070613 |

JP 2008-2869

A 20080110

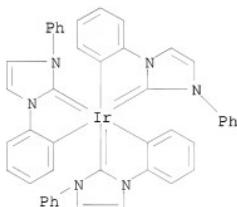
AB An object of this invention is to produce a phosphorescent organic electroluminescent element which can realize an electroluminescent peak in a deep blue region of not more than 440 nm which is important for completing a full-color display. The object can be attained by an organic electroluminescent element comprising a pair of electrodes, a luminescent layer or a plurality of thin organic compound layers including a luminescent layer between the pair of electrodes, characterized in that a phosphorescent electroluminescent peak appears at a wavelength of not more than 440 nm and further characterized in that the maximum phosphorescent electroluminescent peak appears in a deep blue region at a wavelength of not more than 440 nm, and the luminescent color is such that, in a CIE color system, y-coordinate is less than 0.180.

IT 895556-02-2

RL: TEM (Technical or engineered material use); USES (Uses)
 (phosphorescent organic electroluminescent elements for full-color displays)

RN 895556-02-2 CAPLUS

CN Iridium, tris[1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]-
 (9CI) (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1334493 CAPLUS

DOCUMENT NUMBER: 149:534395

TITLE: Silanes containing phenothiazine-S-oxide or phenothiazine-S,S-dioxide groups as matrix and blocker components of organic light-emitting devices (OLEDs)

INVENTOR(S): Moonen, Nicolle; Kahle, Klaus; Lennartz, Christian; Schildknecht, Christian; Nord, Simon; Molt, Oliver; Fuchs, Evelyn; Rudolph, Jens; Wagenblast, Gerhard

PATENT ASSIGNEE(S): BASF SE, Germany
 SOURCE: PCT Int. Appl., 80pp.
 CODEN: PIXXD2

DOCUMENT TYPE: Patent
 LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

| | | | | |
|---|----|----------|-----------------|----------|
| WO 2008132085 | A1 | 20081106 | WO 2008-EP54801 | 20080421 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

PRIORITY APPLN. INFO.: EP 2007-107055 A 20070426

OTHER SOURCE(S): MARPAT 149:534395

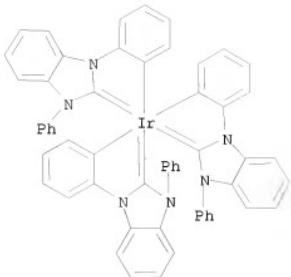
AB Silanes containing phenothiazine-S-oxide or phenothiazine-S,S-dioxide groups, [(R₂oR₃pcI₂H₈-o-pXN)nL]mSiR₁₄-m (1; C₁₂H₈XN = 10-phenothiazinyl S-oxide, X = SO; 10-phenothiazinyl S,S-dioxide, X = SO₂; R₂, R₃ = alkyl, (hetero)aryl, amino, hydroxy, alkoxy, aryloxy, arylcarbonyloxy, acyl, amido, ester, thiocarboxylate, carbonylamino, silyl; R₁ = H, alkyl, aryl, 4-carbazol-9-phenyl; m = 1-4, preferably 2-4; n = 1,2; o, p = 0-4, preferably o, p = 0; L = bridging group, preferably L = (un)substituted phenylene, heterocyclodiyli), useful as electron-conducting/blocker or electron and hole conducting/blocker materials, as components for light-emitting layers in combination with a triplet emitter metal complex, were prepared by a multistep procedure, comprising N-alkylation of (un)substituted phenothiazine by a spacer derivative X-L-Y to give a phenothiazine derivis. (R₂oR₃pcI₂H₈-o-pXN)nLY (2, same R, L; X = S, Y = halo), followed by reaction with halo- or alkoxy silanes RImSiY₁₄-m (6; Y₁ = halo, alkoxy) and oxidation of the phenothiazine moiety into S-oxide or S,S-dioxide. In an example, Grignard reaction of 10-(4-bromophenyl)phenothiazine with Me₂SiCl₂ gave bis-thiazine silane, (SC₁₂H₈N-1,4-C₆H₄)₂SiMe₂, which gave the compound of the invention, (O₂SC₁₂H₈N-1,4-C₆H₄)₂SiMe₂ (1a) upon oxidation with 70% m-chloroperbenzoic acid for 20 h at 20°. In another example, OLED having iridium tris[1-methyl-3-(4-trifluoromethylphenyl)benzimidazole] complex as a dopant to a light-emitting matrix composed from the compound 1a, exhibited electroluminescence at 455 nm with 6.0 cd/A current efficiency, 5.4% quantum yield and 400 cd/m² light d. Preparation of iridium cyclometalated N-arylbenzimidazole carbene complexes as phosphorescent materials is also described.

IT 888725-36-8

RL: TEM (Technical or engineered material use); USES (Uses)
(preparation of silyl phenothiazine oxides and dioxides as electron-, hole-transporting and matrix materials for organic light-emitting devices comprising cyclometalated iridium carbene complexes)

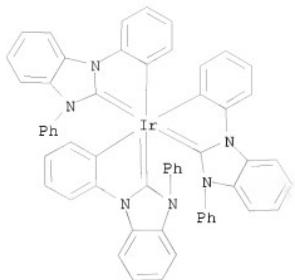
RN 888725-36-8 CAPLUS

CN Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-
(9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:1149160 CAPLUS
 DOCUMENT NUMBER: 149:543892
 TITLE: Controlling the radiative rate of deep-blue electrophosphorescent organometallic complexes by singlet-triplet gap engineering
 AUTHOR(S): Haneder, Stephan; Da Como, Enrico; Feldmann, Jochen; Lupton, John M.; Lemnartz, Christian; Erk, Peter; Fuchs, Evelyn; Molt, Oliver; Muenster, Ingo; Schildknecht, Christian; Wagenblast, Gerhard
 CORPORATE SOURCE: Photonics and Optoelectronics Group, Department of Physics and CeNS, Ludwig-Maximilians-Universitaet, Munich, 80799, Germany
 SOURCE: Advanced Materials (Weinheim, Germany) (2008), 20(17), 3325-3330
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The phosphorescence radiative rate of electroluminescent metal complexes is controlled by the singlet-triplet splitting (ΔEST). The figure shows how the chemical tailoring of ΔEST influences the radiative rate in a new class of deep-blue emitting complexes. This approach holds promise for the preparation of efficient deep-blue OLEDs (see inset) for solid state lighting applications.
 IT 888725-36-8
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (controlling the radiative rate of deep-blue electrophosphorescent organometallic complexes by singlet-triplet gap engineering)
 RN 888725-36-8 CAPLUS
 CN Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:1029003 CAPLUS
 DOCUMENT NUMBER: 149:378875
 TITLE: C-H Bond Activation through σ -Bond Metathesis and Agostic Interactions: Deactivation Pathway of a Grubbs Second-Generation Catalyst
 AUTHOR(S): Mathew, Jomon; Koga, Nobuaki; Suresh, Cherumuttathu H.
 CORPORATE SOURCE: Computational Modeling and Simulation Section, National Institute for Interdisciplinary Science and Technology, CSIR, Trivandrum, Kerala, India
 SOURCE: Organometallics (2008), 27(18), 4666-4670
 CODEN: ORGND7; ISSN: 0276-7333
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A mechanistic study was carried out to explore the structural and energetic features leading to the decomposition pathways of a Grubbs 2nd-generation olefin metathesis catalyst using d. functional theory. The active form of the catalyst 2 has an inherent tendency to undergo intramol. reactions, as the highly electron-deficient Ru center is in close proximity to the C-H bonds of the N-substituents. The theor. results strongly suggest that the deactivation pathway initiates with the C-H activation rather than pericyclic cyclization suggested for the related Grubbs-Hoveyda catalyst system by Blechert et al. Complex 2 passes through five transition states, viz., (i) formation of an agostic complex through the activation of a C-H bond of the N-heterocyclic carbene (NHC)-Ph ring; (ii) C-H σ -bond metathesis with a carbene moiety to form a benzyl complex; (iii) two-step rotational transformations of the benzyl unit; and (iv) carbene-arene bond formation to yield the 1st product, 3. The last step is the rate-determining step, with the highest activation barrier of 28.6 kcal/mol, while the activation energy for steps (i), (ii), and (iii) are 13.6, 26.7, and 18.8 kcal/mol, resp. The transformation of the rigid carbene unit to a flexible benzyl unit facilitates the rotational transformations in step (iii) and the subsequent C-C bond formation in step (iv). The η^6 -coordination of Ph ring in 3 changes to η^2 to produce a less strained complex, and the

C-H activation of the 2nd NHC-Ph ring occurs easily with this transformation, leading to a C-H agostic complex through a transition state with the activation barrier of 28.3 kcal/mol. The agostic interaction breaks up in the next step, leading to the Ru-C bond formation and the reductive elimination of HCl to the 2nd product, 4. The flexibility of all three Ph rings through their single bond connectivity plays a major role in the deactivation process of 2, as it leads to C-H agostic interactions with the Ru center. Therefore, the deactivation can be controlled by designing NHCs with rigid substituents, which may not undergo agostic interactions.

IT 1059139-80-8 1059139-82-0 1059139-86-4

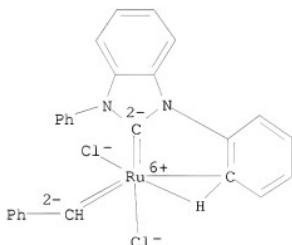
1059139-87-5

RL: PRP (Properties)

(calculated optimized geometry and energy; mechanism of deactivation pathway of a Grubbs second-generation olefin metathesis catalyst via C-H bond activation and agostic interactions using DFT)

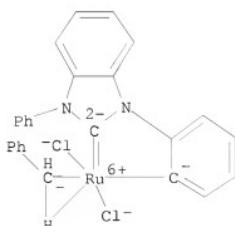
RN 1059139-80-8 CAPLUS

CN Ruthenium, dichloro[1,3-dihydro-1-(phenyl- κ C2, κ H2)-3-phenyl-1H-benzimidazol-2-ylidene- κ C2](phenylmethylene)-, (OC-6-52)- (CA INDEX NAME)

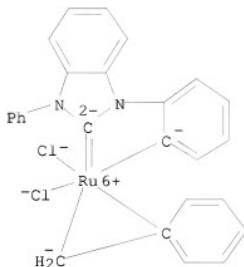


RN 1059139-82-0 CAPLUS

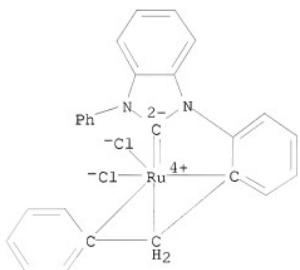
CN Ruthenium, dichloro[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene](phenylmethyl- κ C, κ H)-, (OC-6-52)- (CA INDEX NAME)



RN 1059139-86-4 CAPLUS

CN Ruthenium, dichloro[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene][(phenyl- κ C1)methyl- κ C]-, (OC-6-32)- (CA INDEX NAME)

RN 1059139-87-5 CAPLUS

CN Ruthenium, dichloro[1,3-dihydro-1-phenyl-3-[2-[(phenyl- κ C1)methyl- κ C]phenyl- κ C2]-2H-benzimidazol-2-ylidene]-, (OC-6-43)- (CA INDEX NAME)

REFERENCE COUNT:

53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:773582 CAPLUS

DOCUMENT NUMBER: 149:91175

TITLE: Organic electroluminescent devices including no optical defect and high luminance and efficiency

INVENTOR(S): Iwakuma, Toshihiro; Watanabe, Masami; Okuda, Fumio; Nishimura, Kazuki; Hosokawa, Chishio

PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 22pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|-----------|-----------------|----------|
| JP 2008147424 | A | 20080626 | JP 2006-332946 | 20061211 |
| PRIORITY APPLN. INFO.: | | | JP 2006-332946 | 20061211 |
| OTHER SOURCE(S): | MARPAT | 149:91175 | | |
| GI | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

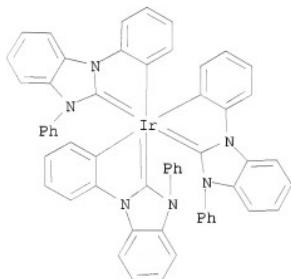
AB The devices contain, in the layers adjacent to emitting layers, metal complexes I-IV [M = metal; R₁ = H, alk(en)yl, alkenyln, (hetero)aryl, etc.; R₂, R₃, R₈, R₁₁, R₁₂ = H, alkyl, aralkyl, CN, CF₃, halo, etc.; J = R, CN, CF₃, CO₂R, etc. (R = H, halo, alk(en)yl, etc.); XY = chiral ligand, auxiliary ligand; e = 0-4; m, n ≥ 1; m + n = the maximum coordination number for M]. The layers adjacent to the emitting layers may be hole-, electron-, and/or exciton-blocking layers. The devices show long service life.

IT 913636-78-9

RL: TEM (Technical or engineered material use); USES (Uses)
 (exciton-blocking layers; organic electroluminescent devices including no optical defect and high luminance and efficiency)

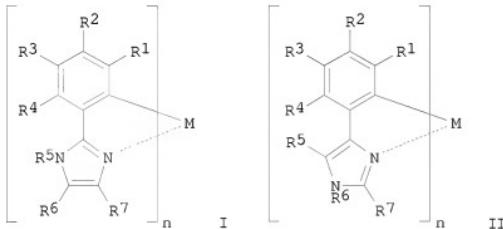
RN 913636-78-9 CAPLUS

CN Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-, (OC-6-22)- (CA INDEX NAME)



ACCESSION NUMBER: 2008:773530 CAPLUS
 DOCUMENT NUMBER: 149:91173
 TITLE: Organic electroluminescent devices free from image
 defects and showing high efficiency at low drive
 voltage
 INVENTOR(S): Iwakuma, Toshihiro; Watanabe, Masami; Okuda, Fumio;
 Nishimura, Kazuki; Hosokawa, Chishio
 IDEMITSU KOSAN CO., LTD., Japan
 PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 18pp.
 SOURCE: CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------|-----------|----------|-----------------|----------|
| JP 2008147400 | A | 20080626 | JP 2006-332516 | 20061208 |
| PRIORITY APPLN. INFO.: | | | JP 2006-332516 | 20061208 |
| OTHER SOURCE(S): MARPAT | 149:91173 | | | |



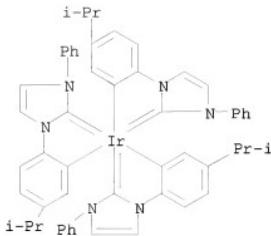
AB The devices have, in hole-injection and/or -transport layers, metal complexes represented by I and/or II [R1-R7 = H, CN, nitro, halo, Cl-20 alkyl(oxy), amino, etc.; M = Ir, Rh, Pt, Pd; n = 1-3] and preferably (Cz)car4bar3Ar1aAr2 [Cz = (C18-60 aryl)carbazolyl, azacarbazolyl, etc.; Ar1, Ar2 = C6-60 aryl, C3-60 heterocycle; Ar3 = C6-60 aromatic or C3-60 heterocyclic group; Ar4 = benzene, thiophene, triazole, or (spiro)fluorene residue] in emitting layers.

IT 895556-06-6

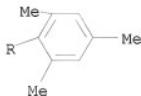
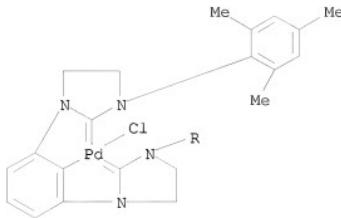
RL: TEM (Technical or engineered material use); USES (Uses)
 (hole-injecting layers; organic electroluminescent devices free from
 defects and showing high efficiency at low drive voltage)

RN 895556-06-6 CAPLUS

CN Iridium, tris([5-(1-methylethyl)-1,2-phenylene](3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene))- (9CI) (CA INDEX NAME)



L4 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:531767 CAPLUS
 DOCUMENT NUMBER: 150:398687
 TITLE: Discovery and synthesis of a new bis(thiourea)-Pd pincer guided by ESI-MS/MS
 AUTHOR(S): Rui, Li; Wei, Chen; Shi, Jianyou; Chen, Lijuan; Chen, Yingchun; Ding, Lisheng; Wei, Yuquan
 CORPORATE SOURCE: State Key Lab. Biotherapy, West China Hospital, Sichuan University, Chengdu, 610041, Peop. Rep. China
 SOURCE: Journal of Mass Spectrometry (2008), 43(4), 542-546
 CODEN: JMSPFJ; ISSN: 1076-5174
 PUBLISHER: John Wiley & Sons Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The fission mechanisms of thioureas and their corresponding Pd complexes under electrospray ionization (ESI) conditions were investigated. A new bis(thiourea)palladium pincer and a series of hybrid (thiourea and carbene)palladium pincers and bis (carbene)palladium pincer were observed in ESI-MS expts. The new bis(thiourea)palladium pincer was synthesized and its catalytic activity in the Suzuki coupling reaction forming biaryls was compared with the bis(thiourea)-Pd0 complex. E.g., coupling of 3-O2NC6H4Br with PhB(OH)2 gave 99% m-PhC6H4NO2 with either of these palladium catalysts.
 IT 1138479-16-9P
 RL: CAT (Catalyst use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (mol. structure; discovery and preparation of a new bis(thiourea)palladium pincer guided by ESI-MS/MS and catalytic activity of this and similar complexes in Suzuki coupling reaction)
 RN 1138479-16-9 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:381102 CAPLUS
 DOCUMENT NUMBER: 148:366850
 TITLE: Organic light emitting diode display with extended lifetime
 INVENTOR(S): Schildknecht, Christian; Fuchs, Evelyn; Moonen, Nicolle; Kahle, Klaus; Lennartz, Christian; Molt, Oliver; Wagenblast, Gerhard; Rudolph, Jens
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 64pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2008034758 | A2 | 20080327 | WO 2007-EP59648 | 20070913 |
| WO 2008034758 | A3 | 20080710 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, | | | | |

BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
KR 2009051266 A 20090521 KR 2009-706991 20090406
PRIORITY APPLN. INFO.: EP 2006-121077 A 20060921
EP 2007-111816 A 20070705
WO 2007-EP59648 W 20070913

OTHER SOURCE(S): MARPAT 148:366850

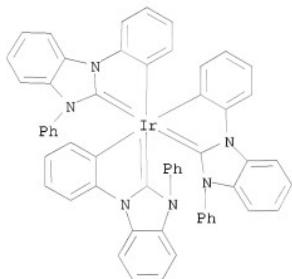
AB The present invention relates to an organic light-emitting diode (OLED) which has a light-emitting layer C which contains at least one hole-conducting material and at least one phosphorescence emitter, mixts. containing at least one carbene complex in combination with at least one hole-conducting material or in combination with at least one phosphorescence emitter, and the use of mixts. containing at least one hole-conducting material and at least one phosphorescence emitter as a light-emitting layer in OLEDs for extending the lifetime of the light-emitting layer. The organic light-emitting diode according to the invention can have in at least one of the layers of the organic light-emitting diode, preferably in the hole-blocking layer and/or the electron-blocking layer and/or the light-emitting layer, in addition to the hole-conducting material and the emitter, at least one compound selected from disilylcarbazoles, disilyldibenzofurans, disilyldibenzothiophenes, disilyldibenzophospholes, disilyldibenzothiophene-S-oxides and disilyldibenzothiophene-S,S-dioxides.

IT 888725-36-8

RL: TEM (Technical or engineered material use); USES (Uses)
(organic light emitting diode display with extended lifetime)

RN 888725-36-8 CAPLUS

CN Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-(9CI) (CA INDEX NAME)



L4 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:378150 CAPLUS

DOCUMENT NUMBER: 148:366829

TITLE: Organic electroluminescence element showing improved blue phosphorescent light emitting efficiency, service life, and chromaticity

INVENTOR(S): Suzuri, Yoshiyuki; Nakata, Aki; Naito, Mitsuyoshi;
Kita, Hiroshi

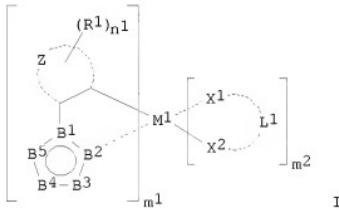
PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan

SOURCE: PCT Int. Appl., 81pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2008035571 | A1 | 20080327 | WO 2007-JP67391 | 20070906 |

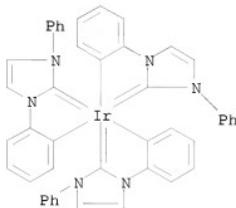
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
 CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,
 GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
 KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
 MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
 PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
 GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: JP 2006-254127 A 20060920
 OTHER SOURCE(S): MARPAT 148:366829
 GI



AB Disclosed is an organic electroluminescence element which is improved in efficiency of emitting blue phosphorescent light, service life and chromaticity. Also disclosed is an organic electroluminescence element which can extract white light including the blue phosphorescent light. The organic electroluminescence elements are characterized by comprising an anode, a light-emitting layer unit having multiple light-emitting layers and a cathode, wherein each of at least two of the multiple light-emitting layers contains a phosphorescent compound represented by the general formula I ($(R1)_{n1}$ = substituent; Z = nonmetal atoms for forming 5- to 7-membered ring; $n1 = 0\text{--}5$; $B1\text{--}5 = C, N, O, S$; at least one of $B1\text{--}5$ is N; $M1$ = group 8 metal, group 9 metal, group 10 metal; $X1, X2 = C, N, O$; $L1$ = atoms together with $X1$ and $X2$ for forming ligand; $m1 = 1, 2, 3$; $m2 = 0, 1, 2$; $m1+m2 = 2$ or 3).

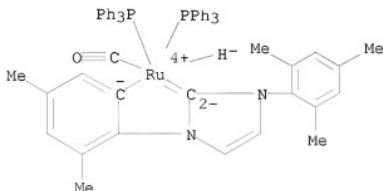
IT 895556-02-2
 RL: MOA (Modifier or additive use); USES (Uses)
 (organic electroluminescence element showing improved blue phosphorescent
 light emitting efficiency, service life, and chromaticity)
 RN 895556-02-2 CAPLUS
 CN Iridium, tris[1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]-
 (9CI) (CA INDEX NAME)



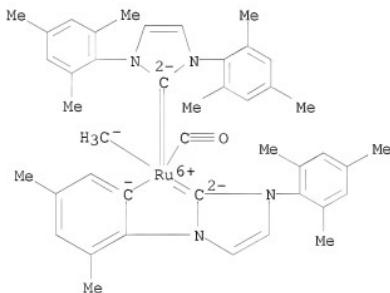
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:87809 CAPLUS
 DOCUMENT NUMBER: 148:285328
 TITLE: Computational study of C-C activation of
 1,3-dimesitylimidazol-2-ylidene (IMes) at ruthenium:
 the role of ligand bulk in accessing reactive
 intermediates
 AUTHOR(S): Diggle, Richard A.; Macgregor, Stuart A.; Whittlesey,
 Michael K.
 CORPORATE SOURCE: School of Engineering and Physical Sciences,
 Heriot-Watt University, Edinburgh, EH14 4AS, UK
 SOURCE: Organometallics (2008), 27(4), 617-625
 CODEN: ORGND7; ISSN: 0276-7333
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB D. functional theory calcns. have been employed to model phosphine
 substitution in Ru(PPh₃)₃(CO)(H)₂ to form Ru(IMes)(PPh₃)₂(CO)(H)₂ (lmono)
 and Ru(IMes)₂(PPh₃)(CO)(H)₂ (lbis), as well as the novel C(aryl)-C(sp³)
 intramol. bond activation of the IMes ligand in lbis. The computed ligand
 exchange energies show that lbis is unstable with respect to displacement
 of IMes by PPh₃ and will thus re-form lmono over time. PPh₃/IMes
 substitution also leads to a significant labilization of the PPh₃ ligand
 trans to hydride, a result of increasing steric encumbrance upon the
 introduction of the bulky IMes ligands. The energetics of intramol. C-C
 and C-H activation have been computed for both 16e Ru(IMes)_n(PPh₃)_{3-n}(CO)
 and 14e Ru(IMes)_n(PPh₃)_{2-n}(CO) species (n = 1 or 2) and indicate that the
 introduction of a second IMes ligand does not significantly promote the
 actual C-C activation step. Instead the need to have two IMes ligands
 present in the metal coordination sphere before C-C activation can occur
 is linked to the promotion of PPh₃ loss in lbis, which makes the formation

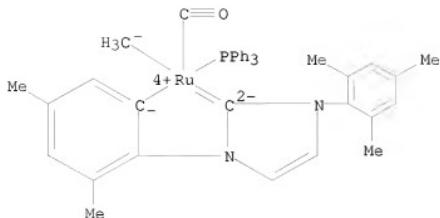
of unsatd. species such as Ru(IMes)₂(CO) particularly accessible.
 IT 434318-96-4 1008533-71-8 1008533-73-0
 1008533-74-1 1008533-75-2
 RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)
 (steric effects in carbon-hydrogen and carbon-carbon bond activation of
 dimesityl imidazolylidene ruthenium carbene hydride complexes)
 RN 434318-96-4 CAPLUS
 CN Ruthenium, carbonyl[(3,5-dimethyl-1,2-phenylene)[3-(2,4,6-trimethylphenyl)-
 1H-imidazol-1-yl-2(3H)-ylidene]hydrobis(triphenylphosphine)-, (OC-6-14)-
 (9CI) (CA INDEX NAME)



RN 1008533-71-8 CAPLUS
 CN Ruthenium, carbonyl[1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-
 2-ylidene][(3,5-dimethyl-1,2-phenylene)[3-(2,4,6-trimethylphenyl)-1H-
 imidazol-1-yl-2(3H)-ylidene]methyl-, (SP-5-54)- (CA INDEX NAME)

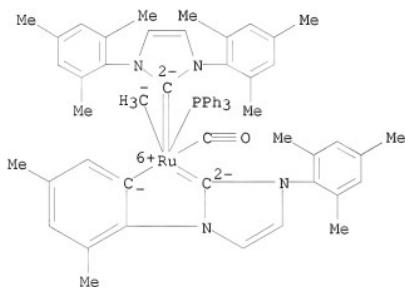


RN 1008533-73-0 CAPLUS
 CN Ruthenium, carbonyl[(3,5-dimethyl-1,2-phenylene)[3-(2,4,6-trimethylphenyl)-
 1H-imidazol-1-yl-2(3H)-ylidene]methyl(triphenylphosphine)-, (SP-5-53)-
 (CA INDEX NAME)



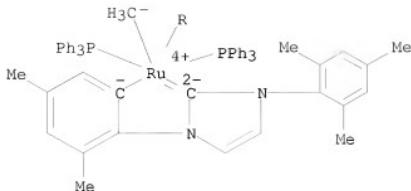
RN 1008533-74-1 CAPLUS

CN Ruthenium, carbonyl[1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene][(3,5-dimethyl-1,2-phenylene)[3-(2,4,6-trimethylphenyl)-1H-imidazol-1-yl-2(3H)-ylidene]]methyl(triphenylphosphine)-, (OC-6-65)- (CA INDEX NAME)

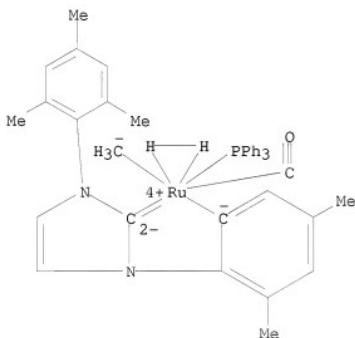


RN 1008533-75-2 CAPLUS

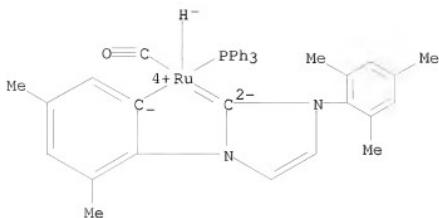
CN Ruthenium, carbonyl[(3,5-dimethyl-1,2-phenylene)[3-(2,4,6-trimethylphenyl)-1H-imidazol-1-yl-2(3H)-ylidene]]methylbis(triphenylphosphine)-, (OC-6-53)- (CA INDEX NAME)



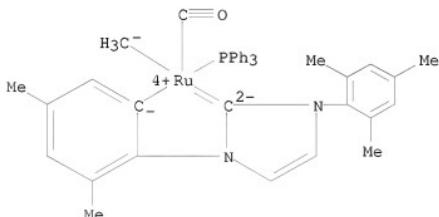
IT 1008533-79-6 1008533-88-7 1008797-88-3
 RL: FMU (Formation, unclassified); PRP (Properties); RCT (Reactant); FORM (Formation, nonpreparative); RACT (Reactant or reagent)
 (steric effects in carbon-hydrogen and carbon-carbon bond activation of dimesityl imidazolylidene ruthenium carbeno hydride complexes)
 RN 1008533-79-6 CAPLUS
 CN Ruthenium, carbonyl(dihydrogen- $\kappa\text{H}1,\kappa\text{H}2$)[(3,5-dimethyl-1,2-phenylene){3-(2,(4,6-trimethylphenyl)-1H-imidazol-1-yl-2(3H)-ylidene)methyl(triphenylphosphine)-, (PB-7-24-13566)- (CA INDEX NAME)



RN 1008533-88-7 CAPLUS
 CN Ruthenium, carbonyl[(3,5-dimethyl-1,2-phenylene){3-(2,(4,6-trimethylphenyl)-1H-imidazol-1-yl-2(3H)-ylidene)]hydro(triphenylphosphine)-, (SP-5-14)- (CA INDEX NAME)



RN 1008797-88-3 CAPLUS
 CN Ruthenium, carbonyl[(3,5-dimethyl-1,2-phenylene)[3-(2,4,6-trimethylphenyl)-1H-imidazol-1-yl-2(3H)-ylidene]]methyl(triphenylphosphine)-, (SP-5-35)-
 (CA INDEX NAME)



REFERENCE COUNT: 124 THERE ARE 124 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:1176628 CAPLUS
 DOCUMENT NUMBER: 147:448934
 TITLE: Heteroleptic cyclometalated transition metal-carbene complexes containing at least two differently substituted N-heterocyclic carbene ligands and their use in organic light-emitting diodes (OLEDs)
 INVENTOR(S): Fuchs, Evelyn; Egen, Martina; Kahle, Klaus; Lennartz, Christian; Molt, Oliver; Nord, Simon; Kowalsky, Wolfgang; Schildknecht, Christian; Johannes, Hans-Hermann
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 88pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-----------|-----------------|------------|
| WO 2007115970 | A1 | 20071018 | WO 2007-EP53213 | 20070403 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| EP 2007779 | A1 | 200801231 | EP 2007-727684 | 20070403 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS | | | | |
| US 20090096367 | A1 | 20090416 | US 2008-296112 | 20081006 |
| KR 2009005349 | A | 20090113 | KR 2008-726664 | 20081030 |
| PRIORITY APPLN. INFO.: | | | EP 2006-112228 | A 20060405 |
| | | | WO 2007-EP53213 | W 20070403 |

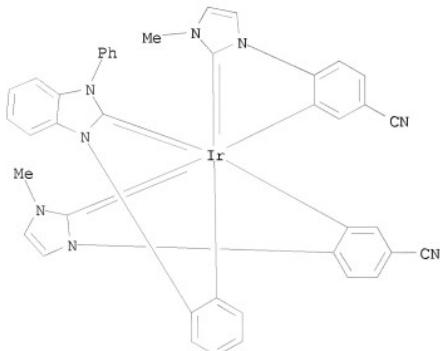
OTHER SOURCE(S): MARPAT 147:448934

AB Cyclometalated transition metal complexes, preferably iridium complexes $[ML(n)L1)m]$, ($1; M = Ir, Co, Rh, Ni, Pd, Pt, Fe, Ru, Os, Cr, Mo, W, Tc, Re, Cu, Au, \text{preferably } M = Ir, Pt, Rh, Os; n+m \geq 2$), containing sym.- and asym. substituted ligands L and L1, resp., having the structure of R3sQ2CR2:CR1XN(Y1)CQ1(Y2)Y3r [Q1 = C, P, N, O, S, Si, preferably Q1 = P, N, O; Q2 = bond, C-, N-, P-, O-, S-, r, s = 2-0, according to the valence of Q1, Q2; X = bond, silylene, C2-10 alkylene, (hetero)arylene, alkenenediyi, alkyndiyi, imino, phosphinidene, boryl, O, S, SO, SO2, CO, CO2, OCO; Y1, Y2 = H, organyl, Y1-Y2 = bridge forming 5-7-membered ring; Y3 = H, organyl for asym. L1, Y3 = R3sQ2CR2:CR1XN(Y1) with same meanings for sym. L; R1, R2 = H, organyl, R1-R2 = bridge forming (un)saturated 5-7-membered ring; R3 = H, organyl], useful as phosphorescent substances for doping of light-emitting OLED layers, having enhanced tunability by variation of ligands and high electroluminescence efficiency, were prepared by stepwise complexation/metalation of the corresponding ligands L and L1 with metal precursors and examined for their luminescence spectra and efficiency. In an example, iridium carbene intermediate [(COD)ClIr:C(NPh)2(1,2-C6H4)] [la, C(NPh)2(1,2-C6H4) = 1,3-diphenylbenzimidazol-2-ylidene] was prepared by reaction of 22.5 mmol of [Ir2(μ -C1)2(COD)2] with 45 mmol of 1,3-diphenylbenzimidazol-2-ylidene (L) generated from 45 mmol of 1,3-diphenylbenzimidazolium tetrafluoroborate by 45 mmol of potassium hexamethylsilazide in 250 mL of toluene with 49% yield. The intermediate la was then reacted with AgBF4 and 3 equiv of 1-(4-cyanophenyl)-3-methylimidazol-2-ylidene (L1), generated from the corresponding imidazolium salt, giving the cyclometalated product, according to invention, [(1-(C6H4- κ C2)-3-Ph-benzimidazol-2-ylidene)[1-(4-NCC6H3- κ C2)-3-Me-imidazol-2-ylidene]2Ir] (1b) with 34% yield. In another example, a polymethylmethacrylate film doped with 2 wt% of the complex 1b exhibited electroluminescence at 450 nm with quantum yield of 78%.

IT 952311-89-6P

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP

(Preparation); PROC (Process); USES (Uses)
 (electroluminescence; preparation and electroluminescence of iridium
 heteroleptic cyclometalated unsym. substituted N-heterocyclic carbene
 complexes as dopants for high-efficient organic light-emitting devices)
 RN 952311-89-6 CAPLUS
 CN Iridium, bis[(5-cyano-1,2-phenylene)(3-methyl-1H-imidazol-1-yl-2(3H)-
 ylidene)][(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-
 (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:1102763 CAPLUS
 DOCUMENT NUMBER: 148:11327
 TITLE: Cyclometalated and Alkoxyphenyl-Substituted Palladium Imidazolin-2-ylidene Complexes. Synthetic, Structural, and Catalytic Studies
 AUTHOR(S): Stylianides, Neoklis; Danopoulos, Andreas A.; Pugh, David; Hancock, Fred; Zanotti-Gerosa, Antonio
 CORPORATE SOURCE: School of Chemistry, University of Southampton, Southampton, SO17 1BJ, UK
 SOURCE: Organometallics (2007), 26(23), 5627-5635
 CODEN: ORGND7; ISSN: 0276-7333
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 148:11327
 AB 1,3-Diarylimidazolinium salts, having one unsubstituted ortho-position of the aryl ring, [1,3-Ar₂C₃H₅N₂]X {3a-h; Ar = 2-MeC₆H₄, 2-iPrC₆H₄, 2-MeOC₆H₄, 4-MeOC₆H₄, 2,4-(MeO)₂C₆H₃, 2-iPrOC₆H₄, 4-iPrOC₆H₄, 2,4,6-(MeO)₃C₆H₂] were prepared by heterocyclization of the corresponding N,N'-diaryl-1,2-ethanediamines with tri-Et orthoformate. The salts 3a-g undergo deprotonation and cyclopalladation with Pd(tmada)Me₂ affording

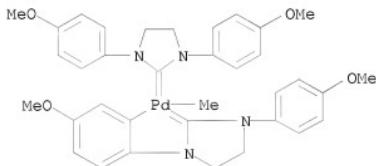
cis-bis-carbene complexes (6), mono- and new type of "pincer" bis-ortho-metallated species (9, 8) and Pd(0) complex trans-[L₂Pd] (7, HL = proligands 3). The activities of the new bis-acetato-bridged palladium ortho-metallated dimer (4) and methylpalladium mono-metallated bis-carbene [(1,3-Ar₂C₃H₄-κC₂)₁-Ar-3-(4-MeOC₆H₃-κC₂')C₃H₄N₂-κC₂]Pd(Me)] (9d, Ar = 4-MeOC₆H₄) in the Heck reaction of aryl halides were compared. At higher temps. the complexes 9d and its 2,4-dimethoxyphenyl analog (9e) show low activity in the coupling of aryl chlorides.

IT 957476-14-1P 957476-15-2P

RL: CAT (Catalyst use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (crystal structure; preparation, structure and catalytic activity of palladium ortho-metallated 1,3-diaryl-2-imidazolidinylidene carbene complexes)

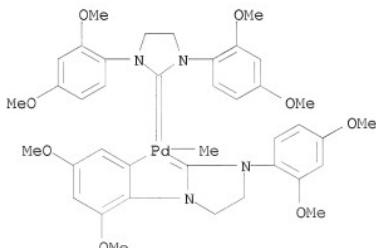
RN 957476-14-1 CAPLUS

CN Palladium, [1,3-bis(4-methoxyphenyl)-2-imidazolidinylidene]methyl[(5-methoxy-1,2-phenylene)[3-(4-methoxyphenyl)-1-imidazolidinyl-2-ylidene]]-, (SP-4-3)- (CA INDEX NAME)



RN 957476-15-2 CAPLUS

CN Palladium, [1,3-bis(2,4-dimethoxyphenyl)-2-imidazolidinylidene]methyl[(3,5-dimethoxy-1,2-phenylene)[3-(2,4-dimethoxyphenyl)-1-imidazolidinyl-2-ylidene]]-, (SP-4-3)- (CA INDEX NAME)



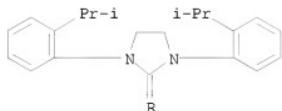
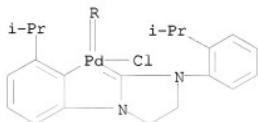
IT 957476-10-7P 957766-89-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (crystal structure; preparation, structure and catalytic activity of

palladium ortho-metatalated 1,3-diaryl-2-imidazolidinylidene carbene complexes)

RN 957476-10-7 CAPLUS

CN Palladium, [1,3-bis[2-(1-methylethyl)phenyl]-2-imidazolidinylidene]chloro[6-(1-methylethyl)-1,2-phenylene][3-(3-(1-methylethyl)phenyl)-1-imidazolidinyl-2-ylidene]]-, (SP-4-4)- (CA INDEX NAME)



RN 957766-89-1 CAPLUS

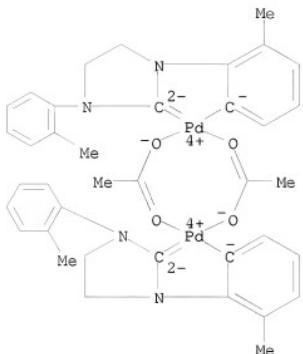
CN Palladium, bis[μ-(acetato-κO:κO')]bis[(3-methyl-1,2-phenylene)[3-(2-methylphenyl)-1-imidazolidinyl-2-ylidene]]di-, stereoisomer, compd. with methylbenzene (2:3) (CA INDEX NAME)

CM 1

CRN 957476-09-4

CMF C38 H40 N4 O4 Pd2

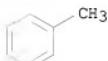
CCI CCS



CM 2

CRN 108-88-3

CMF C⁷ H₈



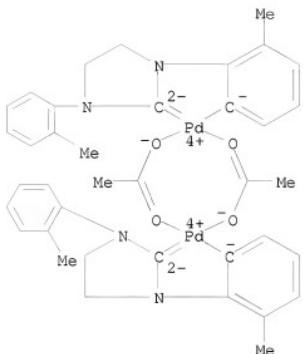
IT 957476-09-4P

RL: CAT (Catalyst use); PRP (Properties); SPN (Synthetic preparation);
PREP (Preparation); USES (Uses)

(mol. structure; preparation, structure and catalytic activity of palladium
ortho-metalated 1,3-diaryl-2-imidazolidinylidene carbene complexes)

RN 957476-09-4 CAPLUS

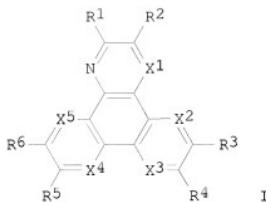
CN Palladium, bis[μ-(acetato-κO:κO')]bis[(3-methyl-1,2-
phenylene){3-(2-methylphenyl)-1-imidazolidinyl-2-ylidene}]di-,
stereoisomer (CA INDEX NAME)



REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:816691 CAPLUS
 DOCUMENT NUMBER: 147:177347
 TITLE: Phosphor dopant host material for organic electroluminescent device to improve light efficiency and extend service life, its use in display and illumination apparatus
 INVENTOR(S): Otsu, Shinya; Kato, Eisaku
 PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 42pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|----------|
| JP 2007189001 | A | 20070726 | JP 2006-4679 | 20060112 |
| PRIORITY APPLN. INFO.: | | | JP 2006-4679 | 20060112 |
| OTHER SOURCE(S): GI | MARPAT | 147:177347 | | |



AB In an organic electroluminescent device comprising a luminescent layer sandwiched between an anode and a cathode, the device contains a compound represented by I (R1-6 = H, substituent like aromatic group, heterocycle group, carbazole group, azacarbazole group, and diphenylamino group; X1-5 = C, N) as a host material for a phosphor dopant, as an electron blocking material or as a hole blocking material. The luminescent layer contains a phosphor dopant emitting ≤ 485 nm light and having an ionization potential of ≤ 5.5 eV.

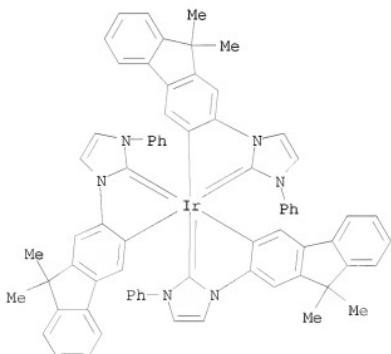
IT 943988-43-0

RL: MOA (Modifier or additive use); USES (Uses)

(phosphor dopant; phosphor dopant host material for organic electroluminescent device to improve light efficiency and extend service life, its use in display and illumination apparatus)

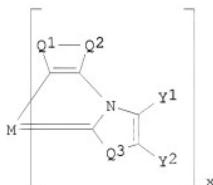
RN 943988-43-0 CAPLUS

CN Iridium, tris[(9,9-dimethyl-9H-fluorene-3,2-diyl)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (CA INDEX NAME)



ACCESSION NUMBER: 20061337747 CAPLUS
 DOCUMENT NUMBER: 146:62927
 TITLE: Process for acid-catalyzed coordinative isomerization
 of electroluminescent platinum-group metal
 cyclometalated N-heterocyclic carbene complexes
 INVENTOR(S): Molt, Oliver; Kahle, Klaus
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 40pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--------------------------------------|----------|-----------------------|------------|
| WO 2006134113 | A1 | 20061221 | WO 2006-EP63165 | 20060613 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM | | | | |
| DE 102005027548 | A1 | 20061221 | DE 2005-102005027548 | 20050614 |
| EP 1899359 | A1 | 20080319 | EP 2006-763686 | 20060613 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| US 20080200686 | A1 | 20080821 | US 2007-916455 | 20071204 |
| PRIORITY APPLN. INFO.: | | | DE 2005-102005027548A | 20050614 |
| | | | WO 2006-EP63165 | W 20060613 |
| OTHER SOURCE(S): | CASREACT 146:62927; MARPAT 146:62927 | | | |
| GI | | | | |



I

AB A process for coordinative isomerization, preferably mer-fac-isomerization of cyclometalated carbene complexes I [M = Pd, Pt, Ru, Os, Co, Rh, Ir, preferably M = Ir(III), x = 2, 3; Q3 = NR, O, S, PR1; Q1-Q2C:C = optionally substituted or annelated 1,2-phenylene, furandiyl, thiophenediyl, pyrrolediyl, pyrazolediyl, isothiazolediyl, isoxazolediyl, thiazolediyl, oxazolediyl, imidazolediyl, pyridinediyl, pyridazinediyl; pyrimidinediyl, pyrazinediyl; Y1 = Y2 = H, alkyl, alkenyl, (hetero)aryl, alkoxy, aryloxy, alkylthio, arylthio, acyl, carboxy, ester, sulfono, sulfonate, halo, CN, CHO, NO2, NO; Y1-Y2 = optionally annelated or substituted benzol, useful as luminescent materials for organic light-emitting devices (no data), comprises reaction of the compds. I with 10-5-10-1 M Bronsted acid in a solvent, preferably water, Cl-4 alc., ketone, esters, halogenated hydrocarbons, DMF, DMSO. In an example, 27 µmol of the complex mer-I (Q1-Q2 = CH:C(CN):CHCH, Q3 = NMe, Y1 = Y2 = H; M = Ir, x = 3) was isomerized to a mixture, containing 75% of fac-I and 25% of the starting mer-I by refluxing in 9.75 mL of acetone with addition of 0.25 mL of 0.1 M aqueous HCl for 4 h.

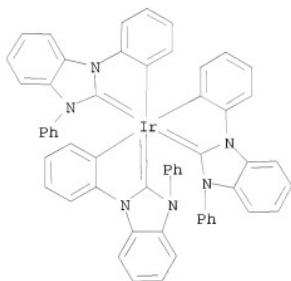
IT 916910-74-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(process for Bronsted acid-catalyzed coordinative mer-fac-isomerization of iridium cyclometalated carbene imidazolylidene electroluminescent complexes)

RN 916910-74-2 CAPLUS

CN Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-, (OC-6-21)- (CA INDEX NAME)



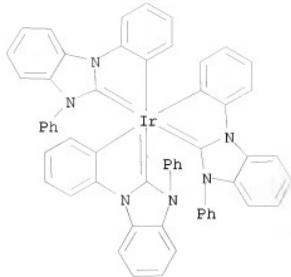
IT 913636-78-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(process for Bronsted acid-catalyzed coordinative mer-fac-isomerization of iridium cyclometalated carbene imidazolylidene electroluminescent complexes)

RN 913636-78-9 CAPLUS

CN Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-, (OC-6-22)- (CA INDEX NAME)



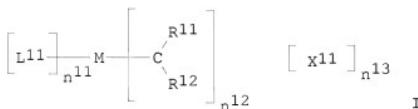
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 29 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:1147668 CAPLUS
 DOCUMENT NUMBER: 145:480101
 TITLE: Organic electroluminescent device
 INVENTOR(S): Murakami, Takeshi; Yagi, Kazunari; Ichijima, Seiji;
 Igarashi, Tatsuya; Satou, Tasuku
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 122pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|------------|
| WO 2006115301 | A1 | 20061102 | WO 2006-JP309142 | 20060425 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ,
NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM | | | | |
| JP 2007096259 | A | 20070412 | JP 2006-119522 | 20060424 |
| EP 1874894 | A1 | 20080109 | EP 2006-745992 | 20060425 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| US 20090079329 | A1 | 20090326 | US 2007-911665 | 20071016 |
| PRIORITY APPLN. INFO.: | | | JP 2005-126262 | A 20050425 |

JP 2005-247418 A 20050829
 WO 2006-JP309142 W 20060425

OTHER SOURCE(S) : MARPAT 145:480101
 GI



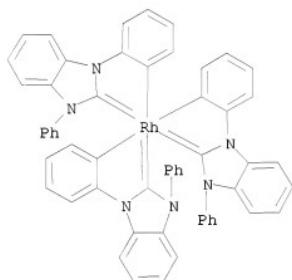
AB An organic electroluminescent device is described comprising a pair of electrodes; and at least one organic layer between the pair of electrodes, where the at least one organic layer contains a specific compound with a general formula I (M = a transition metal atom/ion; R11, R12 = (independently) H, a substituent group, R11, R12 may be independently bonded to M or be cyclic; L11 = (ligand) may be bonded to at least one of R11, and R12; X11 = a counter ion; n11 = (integer)0-5; n12 = (integer)1-6; n13 = (integer) 0-3; C = (carbene carbon)may be bonded to R11 and R12 to coordinate with M) in which a transition metal and a carbene carbon are bonded to each other.

IT 913611-59-3P 913636-78-9P

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (organic electroluminescent device having transition metal complex layer)

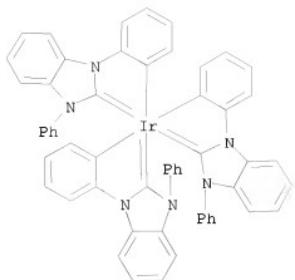
RN 913611-59-3 CAPLUS

CN Rhodium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-, (OC-6-22)- (CA INDEX NAME)



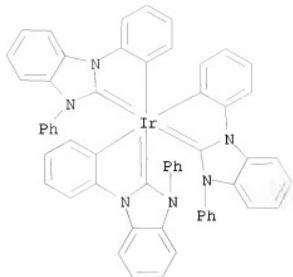
RN 913636-78-9 CAPLUS

CN Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-, (OC-6-22)- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 30 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:714501 CAPLUS
 DOCUMENT NUMBER: 145:428680
 TITLE: Efficient deep blue triplet emitters for OLEDs
 AUTHOR(S): Erk, Peter; Bold, Markus; Egen, Martina; Fuchs, Evelyn; Gessner, Thomas; Kahle, Klaus; Lennartz, Christian; Molt, Oliver; Nord, Simon; Reichelt, Helmut; Schildknecht, Christian; Johannes, Hans-Herrmann; Kowalsky, Wolfgang
 CORPORATE SOURCE: BASF Aktiengesellschaft, Ludwigshafen, 67056, Germany
 SOURCE: Digest of Technical Papers - Society for Information Display International Symposium (2006), 37(Bk. 1), 131-134
 CODEN: DTPSDS
 PUBLISHER: Society for Information Display
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Cyclometallated iridium carbene complexes are introduced as efficient blue triplet emitters. Quantum mech. calcns. have been used to design and to optimize this class of materials predominantly with respect to color coordinates and luminescence quantum yield. To complete the set of materials required for deep blue OLED devices we engineered suitable host and blocker materials for the use in combination with large triplet energy carbene emitters. These tailor-made materials were applied to develop deep blue electroluminescent devices with excellent efficiency.
 IT 888725-36-8
 RL: DEV (Device component use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (efficient deep blue triplet emitter for organic light-emitting diode)
 RN 888725-36-8 CAPLUS
 CN Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-9CI (CA INDEX NAME)



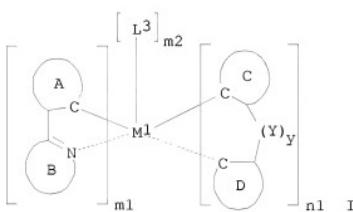
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 31 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:632152 CAPLUS
 DOCUMENT NUMBER: 145:112952
 TITLE: Metal complexes with nucleophilic carbene ligands and devices and processes using them
 INVENTOR(S): Pretot, Roger; Van Der Schaaf, Paul Adriaan; Schmidt, Jemima; Schmidhalter, Beat; Schaefer, Thomas; Lamatsch, Bernd
 PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
 SOURCE: PCT Int. Appl., 149 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2006067074 | A1 | 20060629 | WO 2005-EP56767 | 20051214 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| CA 2589711 | A1 | 20060629 | CA 2005-2589711 | 20051214 |
| EP 1841834 | A1 | 20071010 | EP 2005-817212 | 20051214 |
| EP 1841834 | B1 | 20090506 | | |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, | | | | |

| | | | | |
|--|--------|------------|------------------|------------|
| IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| CN 101087863 | A | 20071212 | CN 2005-80044163 | 20051214 |
| JP 2008525366 | T | 20080717 | JP 2007-547457 | 20051214 |
| AT 430789 | T | 20090515 | AT 2005-817212 | 20051214 |
| IN 2007CN02780 | A | 20070907 | IN 2007-CN2780 | 20070625 |
| KR 2007091355 | A | 20070910 | KR 2007-716762 | 20070720 |
| PRIORITY APPLN. INFO.: | | | EP 2004-106916 | A 20041223 |
| OTHER SOURCE(S): | MARPAT | 145:112952 | WO 2005-EP56767 | W 20051214 |

GI



AB The title complexes are described by the general formula I (ring A = an optionally substituted aryl group which can optionally contain heteroatoms; ring B = an optionally substituted nitrogen-containing aryl group, which can optionally contain further heteroatoms; ring A and ring B may be bonded to form a ring; group C = an acyclic carbene or a cyclic carbene which can optionally contain heteroatoms; ring D = an optionally substituted aryl group which can optionally contain heteroatoms; n1 = 1 = 3, ml = 0, 1, or 2; m2 = 0 or 1; M1 = a metal with an atomic weight > 40; L3 =

a monodentate or bidentate ligand; Y = -C(=O)- or -C(X1)2-; X1 = H or Cl-4 alkyl; and y = 0 or 1) with the exception of certain specified compds. The use of the compds. is described in electronic devices, especially organic light-emitting diodes, as oxygen-sensitive indicators, as phosphorescent indicators in bioassays, and as catalysts. Organic electronic devices, especially

organic light-emitting diodes, comprising an emitting layer which comprises the compds., as well as displays employing the light-emitting diodes, are also described.

IT
 847049-63-2 895527-79-4 895527-80-7
 895527-81-8 895527-82-9 895527-83-0
 895527-84-1 895527-85-2 895527-86-3
 895527-87-4 895527-88-5 895527-89-6
 895527-90-9 895527-91-0 895527-92-1
 895527-93-2 895527-94-3 895527-95-4
 895527-96-5 895527-97-6 895527-98-7
 895528-00-4 895528-01-5 895528-02-6
 895528-03-7 895528-04-8 895528-05-9
 895528-06-0 895528-07-1 895528-08-2
 895528-09-3 895528-10-6 895528-11-7
 895528-12-8 895528-13-9 895528-14-0
 895528-15-1 895528-16-2 895528-17-3

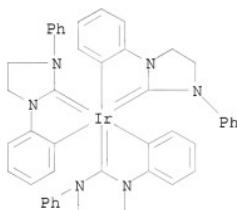
895528-18-4 895528-19-5 895528-20-8
895528-21-9 895528-22-0 895528-23-1
895528-24-2 895528-25-3 895528-26-4
895528-27-5 895528-28-6 895528-29-7
895528-31-1 895528-32-2 895528-33-3
895528-35-5 895528-36-6 895528-37-7
895528-38-8 895528-39-9 895528-40-2
895528-41-3 895528-42-4 895528-43-5
895528-44-6 895528-45-7 895528-46-8
895528-47-9 895528-48-0 895528-49-1
895528-50-4 895528-51-5 895528-52-6
895528-53-7 895528-54-8 895528-56-0
895528-58-2 895528-60-6 895528-62-8
895530-49-1 895530-50-4 895530-51-5
895530-52-6 895530-53-7 895530-54-8
895530-55-9 895530-56-0 895530-57-1
895530-58-2 895530-59-3 895530-60-6
895530-61-7 895530-62-8 895530-63-9
895530-64-0 895530-65-1 895530-66-2
895530-67-3 895530-68-4 895530-69-5
895530-70-8 895530-71-9 895530-72-0
895530-73-1 895530-74-2 895530-75-3
895530-76-4 895530-77-5 895530-78-6
895530-79-7 895530-80-0 895530-81-1
895530-82-2 895530-83-3 895530-84-4
895530-85-5 895530-86-6 895530-87-7
895530-88-8 895530-89-9 895530-90-2
895530-91-3 895530-92-4 895530-93-5
895530-94-6 895530-95-7 895530-96-8
895530-97-9 895530-98-0 895530-99-1
895531-00-7 895531-01-8 895531-02-9
895531-03-0 895531-04-1 895531-05-2
895531-06-3 895531-07-4 895531-08-5
895551-13-0 895551-14-1 895551-15-2
895551-16-3 895551-17-4 895551-18-5
895551-19-6 895551-20-9 895551-21-0
895551-22-1 895551-23-2 895551-24-3
895551-25-4 895551-26-5 895551-27-6
895551-28-7 895551-29-8 895551-30-1
895551-31-2 895551-32-3 895551-33-4
895551-34-5 895551-35-6 895551-36-7
895551-37-8 895551-38-9 895551-39-0
895551-40-3 895551-41-4 895551-42-5
895551-43-6 895551-44-7 895551-45-8
895551-46-9 895551-47-0 895551-48-1
895551-49-2 895551-50-5 895551-51-6
895551-52-7 895551-53-8 895551-54-9
895551-55-0 895551-56-1 895551-57-2
895551-58-3 895551-59-4 895551-60-7
895551-61-8 895551-62-9 895551-63-0
895551-64-1 895551-65-2 895551-66-3
895551-67-4 895551-68-5 895551-69-6
895551-70-9 895551-71-0 895551-72-1
895551-73-2 895551-74-3 895551-75-4
895551-76-5 895551-77-6 895551-78-7
895551-79-8 895551-80-1 895551-81-2
895551-82-3 895551-83-4 895551-84-5

895551-85-6 895551-86-7 895551-87-8
 895551-88-9 895551-89-0 895551-90-3
 895551-91-4 895551-92-5 895551-93-6
 895551-94-7 895551-95-8 895551-97-0
 895551-98-1 895552-00-8 895552-02-0
 895552-04-2 895552-05-3 895552-07-5
 895552-09-7 895552-11-1 895552-13-3
 895552-15-5 895552-17-7 895552-18-8
 895552-19-9 895552-20-2 895552-21-3
 895552-22-4

RL: DEV (Device component use); USES (Uses)
 (metal complexes with nucleophilic carbene ligands and devices and
 processes using them)

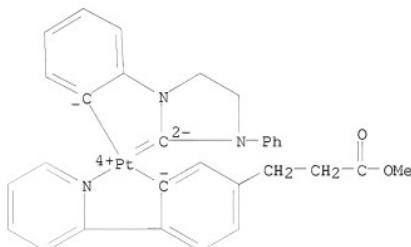
RN 847049-63-2 CAPLUS

CN Iridium, tris[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI)
 (CA INDEX NAME)



RN 895527-79-4 CAPLUS

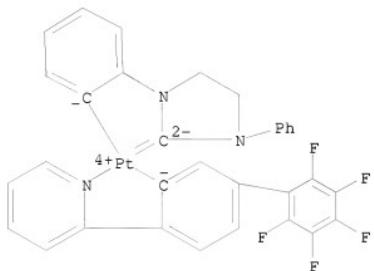
CN Platinum, [5-(3-methoxy-3-oxopropyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895527-80-7 CAPLUS

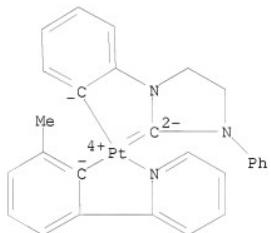
CN Platinum, [2',3',4',5',6'-pentafluoro-4-(2-pyridinyl- κ N)[1,1'-biphenyl]-3-yl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-

ylidene)]- (9CI) (CA INDEX NAME)



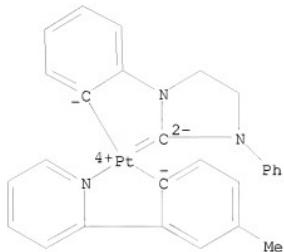
RN 895527-81-8 CAPLUS

CN Platinum, [2-methyl-6-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



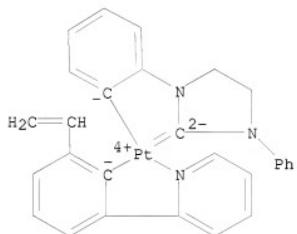
RN 895527-82-9 CAPLUS

CN Platinum, [4-methyl-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



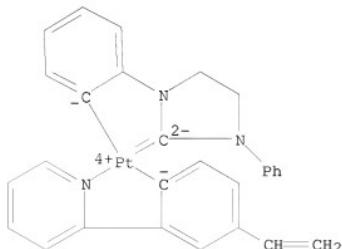
RN 895527-83-0 CAPLUS

CN Platinum, [2-ethenyl-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



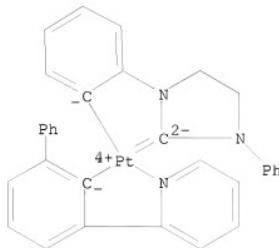
RN 895527-84-1 CAPLUS

CN Platinum, [4-ethenyl-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



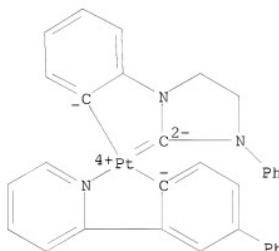
RN 895527-85-2 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][3-(2-pyridinyl- κ N)[1,1'-biphenyl]-2-yl- κ C]- (9CI) (CA INDEX NAME)



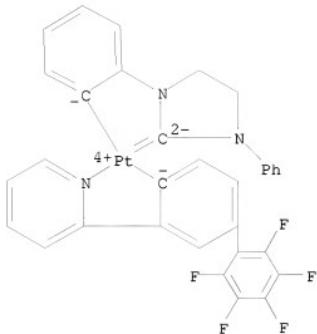
RN 895527-86-3 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][3-(2-pyridinyl- κ N)[1,1'-biphenyl]-4-yl- κ C]- (9CI) (CA INDEX NAME)



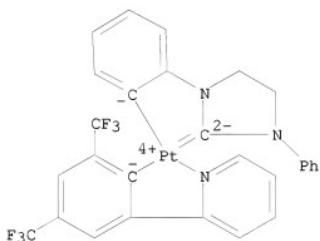
RN 895527-87-4 CAPLUS

CN Platinum, [2',3',4',5',6'-pentafluoro-3-(2-pyridinyl- κ N)[1,1'-biphenyl]-4-yl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



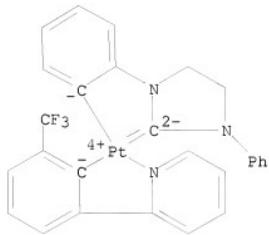
RN 895527-88-5 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(2-pyridinyl- κN)-4,6-bis(trifluoromethyl)phenyl- κC]- (9CI) (CA INDEX NAME)



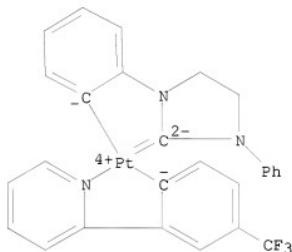
RN 895527-89-6 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(2-pyridinyl- κN)-6-(trifluoromethyl)phenyl- κC]- (9CI) (CA INDEX NAME)



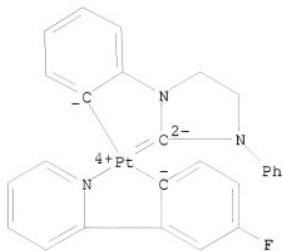
RN 895527-90-9 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(2-pyridinyl-kN)-4-(trifluoromethyl)phenyl-kC]- (9CI) (CA INDEX NAME)



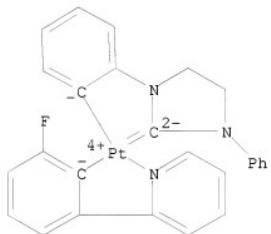
RN 895527-91-0 CAPLUS

CN Platinum, [4-fluoro-2-(2-pyridinyl-kN)phenyl-kC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



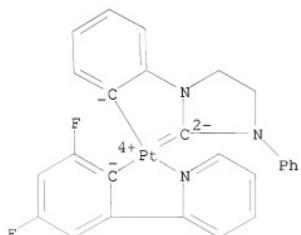
RN 895527-92-1 CAPLUS

CN Platinum, [2-fluoro-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

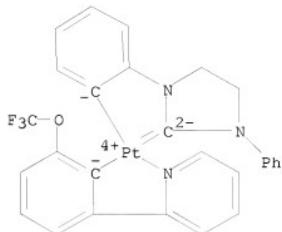


RN 895527-93-2 CAPLUS

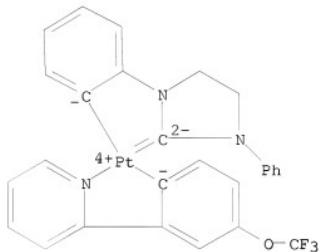
CN Platinum, [2,4-difluoro-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



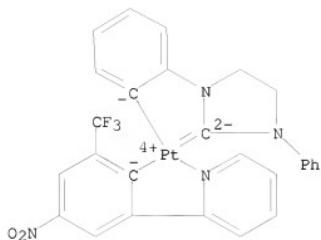
RN 895527-94-3 CAPLUS
CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(2-pyridinyl- κ N)-6-(trifluoromethoxy)phenyl- κ C]- (9CI) (CA INDEX NAME)



RN 895527-95-4 CAPLUS
CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(2-pyridinyl- κ N)-4-(trifluoromethoxy)phenyl- κ C]- (9CI) (CA INDEX NAME)



RN 895527-96-5 CAPLUS
CN Platinum, [4-nitro-2-(2-pyridinyl- κ N)-6-(trifluoromethyl)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



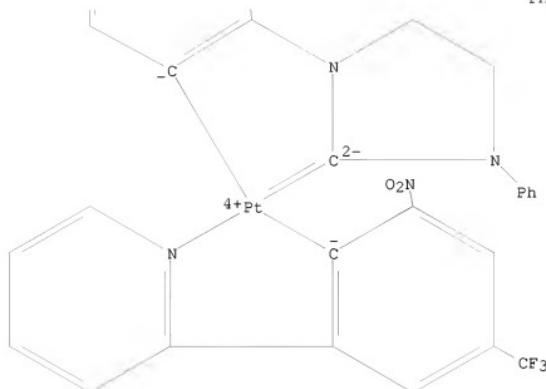
RN 895527-97-6 CAPLUS

CN Platinum, [2-nitro-6-(2-pyridyl- κ N)-4-(trifluoromethyl)phenyl- κ C] [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

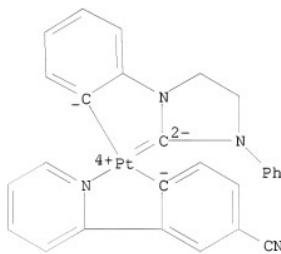
PAGE 1-A



PAGE 2-A

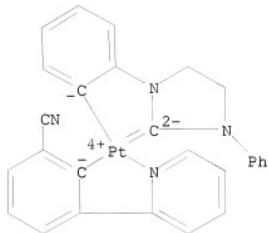


RN 895527-98-7 CAPLUS

CN Platinum, [4-cyano-2-(2-pyridinyl- κ N)phenyl- κ C]{1, 2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)

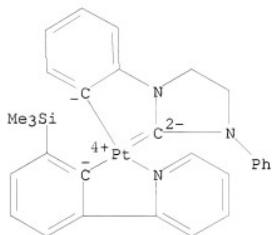
RN 895528-00-4 CAPLUS

CN Platinum, [2-cyano-6-(2-pyridinyl- κ N)phenyl- κ C]{1, 2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



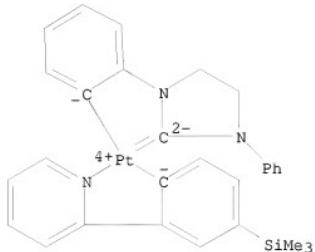
RN 895528-01-5 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(2-pyridinyl- κ N)-6-(trimethylsilyl)phenyl- κ C]- (9CI) (CA INDEX NAME)



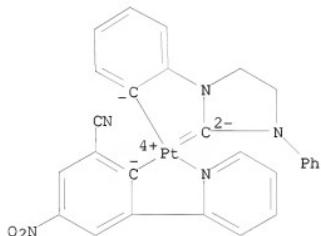
RN 895528-02-6 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(2-pyridinyl- κ N)-4-(trimethylsilyl)phenyl- κ C]- (9CI) (CA INDEX NAME)



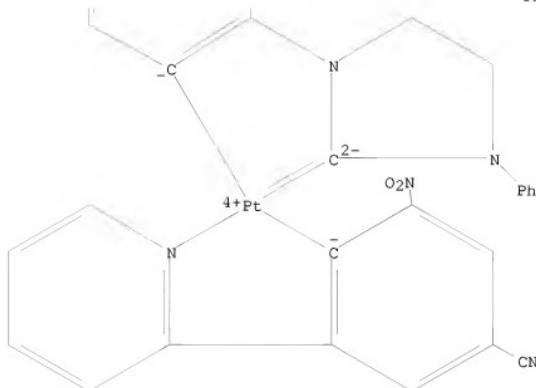
RN 895528-03-7 CAPLUS

CN Platinum, [2-cyano-4-nitro-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895528-04-8 CAPLUS

CN Platinum, [4-cyano-2-nitro-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



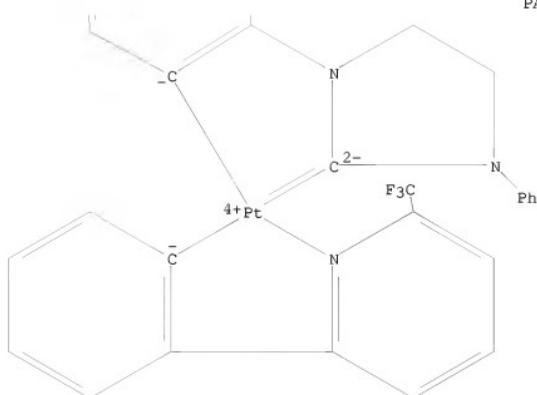
RN 895528-05-9 CAPLUS
CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-[6-

(trifluoromethyl)-2-pyridinyl- κ N[phenyl- κ C]- (9CI) (CA INDEX
NAME)

PAGE 1-A



PAGE 2-A

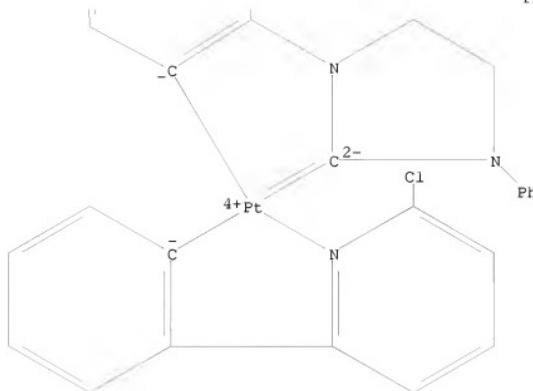


RN 895528-06-0 CAPLUS
CN Platinum, [2-(6-chloro-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



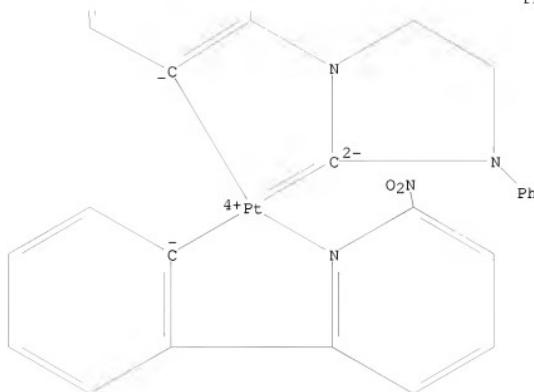
RN 895528-07-1 CAPLUS

CN Platinum, [2-(6-nitro-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



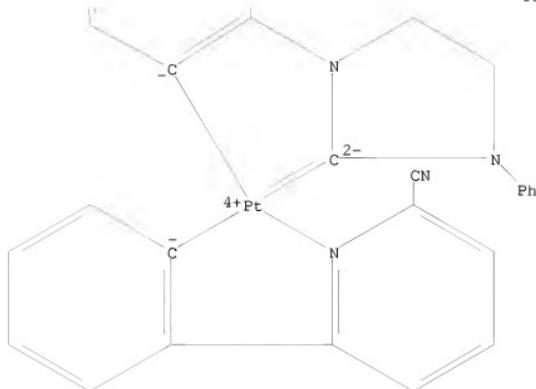
RN 895528-08-2 CAPLUS

CN Platinum, [2-(6-cyano-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



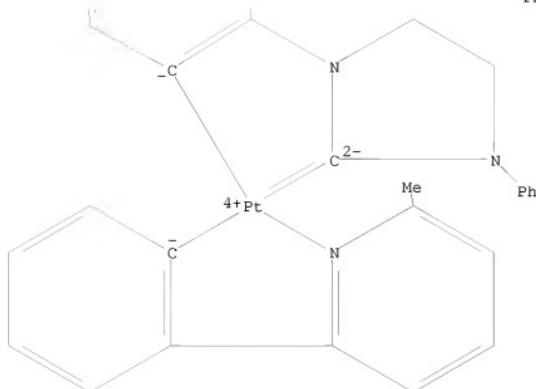
RN 895528-09-3 CAPLUS
CN Platinum, [2-(6-methyl-2-pyridinyl-κN)phenyl-κC] [1,2-

phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

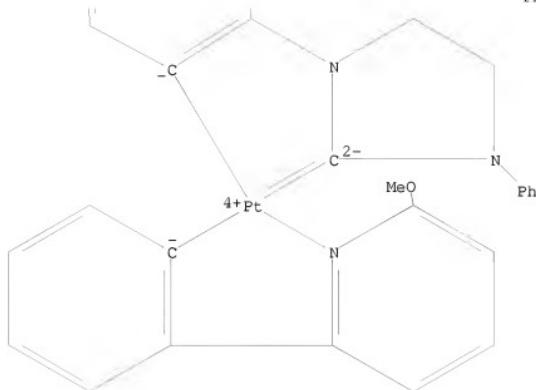


RN 895528-10-6 CAPLUS
CN Platinum, [2-(6-methoxy-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



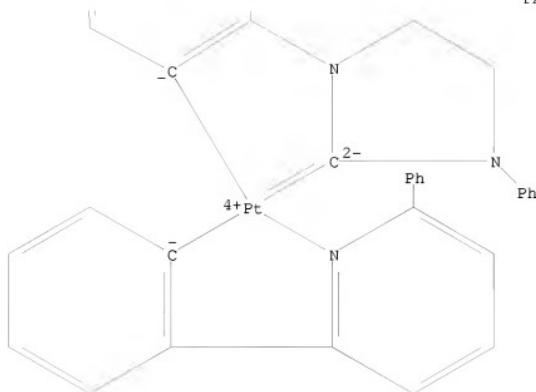
RN 895528-11-7 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(6-phenyl-2-pyridinyl-kN)phenyl-kC]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



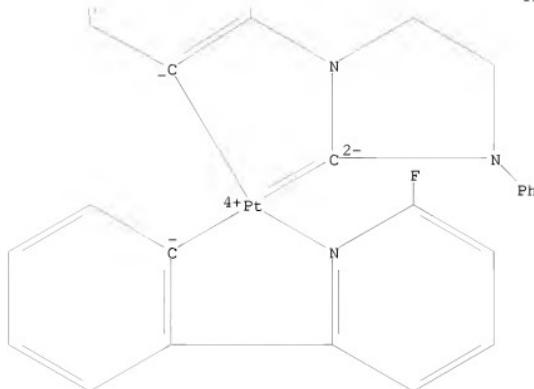
RN 895528-12-8 CAPLUS

CN Platinum, [2-(6-fluoro-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)

PAGE 1-A

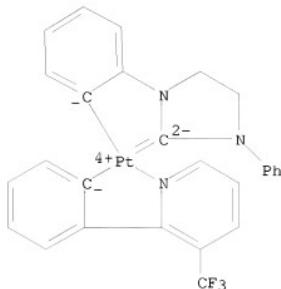


PAGE 2-A



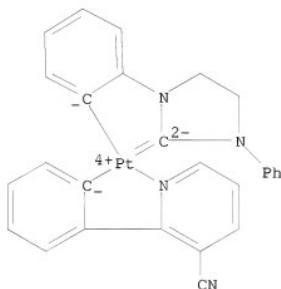
RN 895528-13-9 CAPLUS
CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-[3-

(trifluoromethyl)-2-pyridinyl- κ N]phenyl- κ C]- (9CI) (CA INDEX NAME)



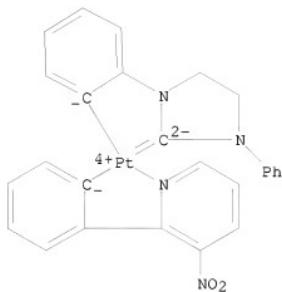
RN 895528-14-0 CAPLUS

CN Platinum, [2-(3-cyano-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



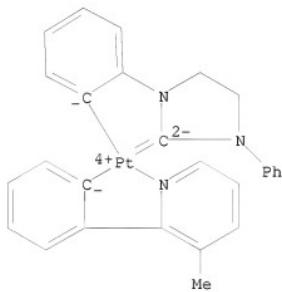
RN 895528-15-1 CAPLUS

CN Platinum, [2-(3-nitro-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



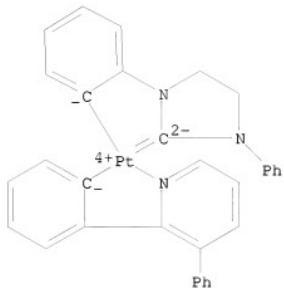
RN 895528-16-2 CAPLUS

CN Platinum, [2-(3-methyl-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



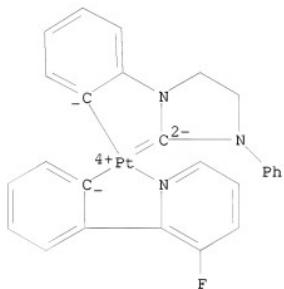
RN 895528-17-3 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(3-phenyl-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



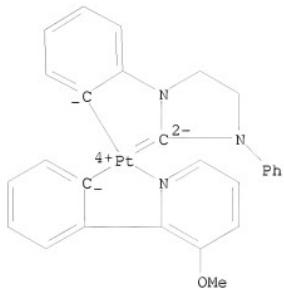
RN 895528-18-4 CAPLUS

CN Platinum, [2-(3-fluoro-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



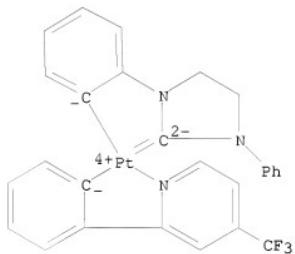
RN 895528-19-5 CAPLUS

CN Platinum, [2-(3-methoxy-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



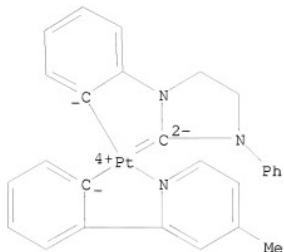
RN 895528-20-8 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(4-(trifluoromethyl)-2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)



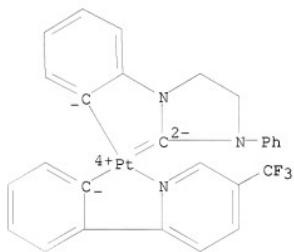
RN 895528-21-9 CAPLUS

CN Platinum, [2-(4-methyl-2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



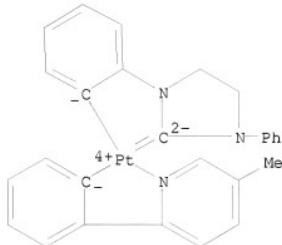
RN 895528-22-0 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(5-(trifluoromethyl)-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



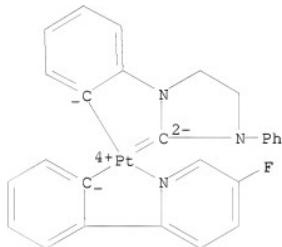
RN 895528-23-1 CAPLUS

CN Platinum, [2-(5-methyl-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



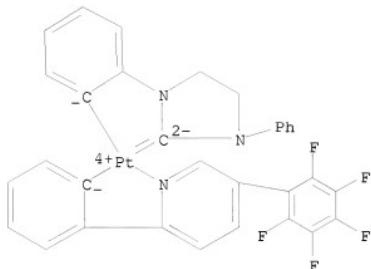
RN 895528-24-2 CAPLUS

CN Platinum, [2-(5-fluoro-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



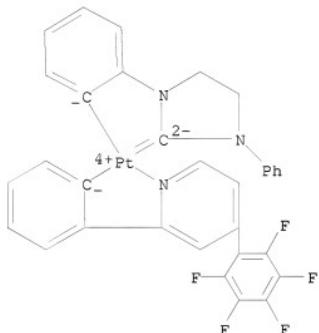
RN 895528-25-3 CAPLUS

CN Platinum, [2-[5-(pentafluorophenyl)-2-pyridinyl- κ N]phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



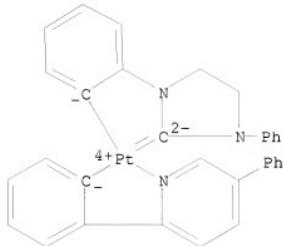
RN 895528-26-4 CAPLUS

CN Platinum, [2-[4-(pentafluorophenyl)-2-pyridinyl-κN]phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

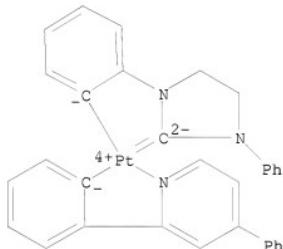


RN 895528-27-5 CAPLUS

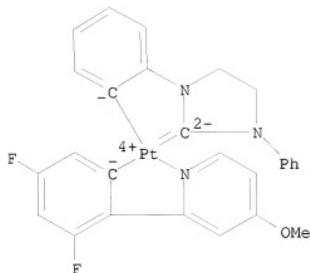
CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(5-phenyl-2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)



RN 895528-28-6 CAPLUS
CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(4-phenyl-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)

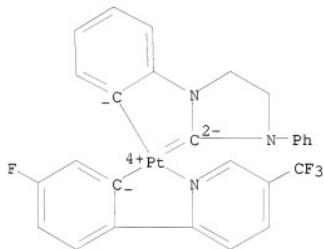


RN 895528-29-7 CAPLUS
CN Platinum, [3,5-difluoro-2-(4-methoxy-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



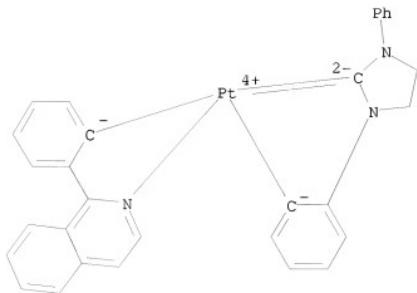
RN 895528-31-1 CAPLUS

CN Platinum, [5-fluoro-2-[5-(trifluoromethyl)-2-pyridinyl- κN]phenyl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



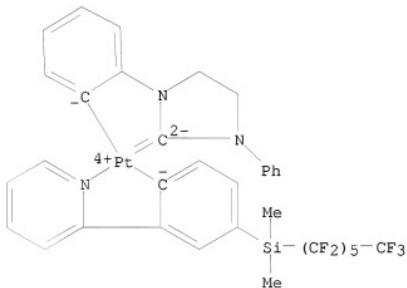
RN 895528-32-2 CAPLUS

CN Platinum, [2-(1-isoquinolinyl- κN)phenyl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



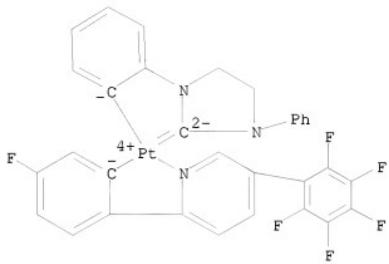
RN 895528-33-3 CAPLUS

CN Platinum, [4-(dimethyl(tridecafluorohexyl)silyl)-2-(2-pyridinyl- κN)phenyl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



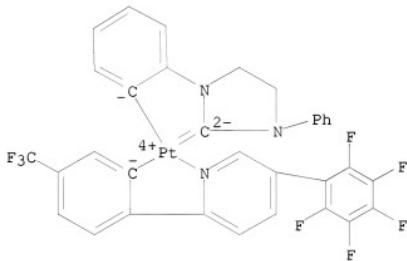
RN 895528-35-5 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][5-fluoro-2-[5-(pentafluorophenyl)-2-pyridinyl- κN]phenyl- κC]- (9CI) (CA INDEX NAME)



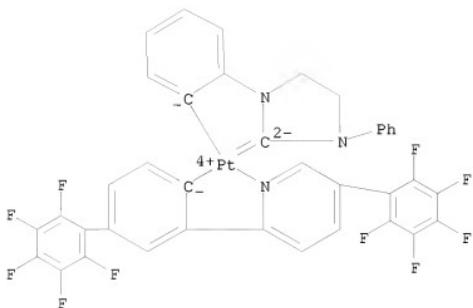
RN 895528-36-6 CAPLUS

CN Platinum, [2-[5-(pentafluorophenyl)-2-pyridinyl- κN]-5-(trifluoromethyl)phenyl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



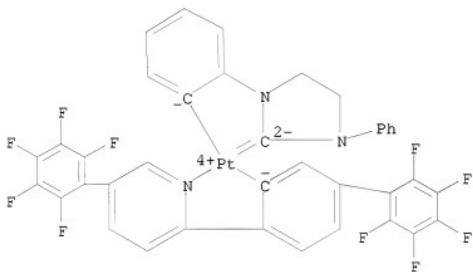
RN 895528-37-7 CAPLUS

CN Platinum, [2',3',4',5',6'-pentafluoro-3-[5-(pentafluorophenyl)-2-pyridinyl- κN][1,1'-biphenyl]-4-yl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



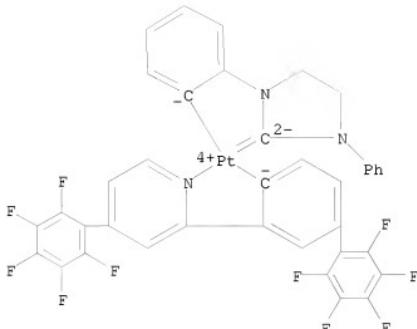
RN 895528-38-8 CAPLUS

CN Platinum, [2',3',4',5',6'-pentafluoro-4-[5-(pentafluorophenyl)-2-pyridinyl- κN][1,1'-biphenyl]-3-yl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

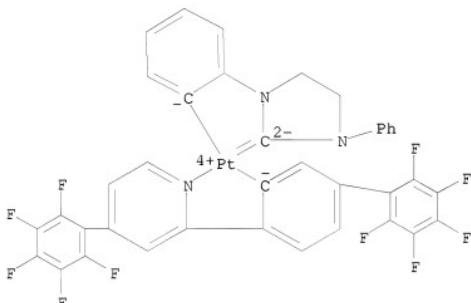


RN 895528-39-9 CAPLUS

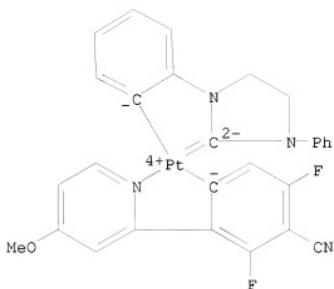
CN Platinum, [2',3',4',5',6'-pentafluoro-3-[4-(pentafluorophenyl)-2-pyridinyl- κN][1,1'-biphenyl]-4-yl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895528-40-2 CAPLUS
CN Platinum, [2',3',4',5',6'-pentafluoro-4-(4-(pentafluorophenyl)-2-pyridinyl-
κN][1,1'-biphenyl]-3-yl-κC][1,2-phenylene(3-phenyl-1-
imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

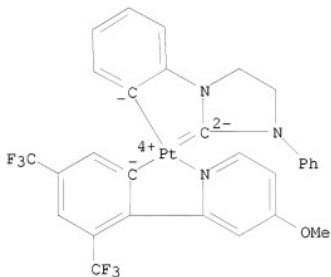


RN 895528-41-3 CAPLUS
CN Platinum, [4-cyano-3,5-difluoro-2-(4-methoxy-2-pyridinyl-κN)phenyl-
κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA
INDEX NAME)



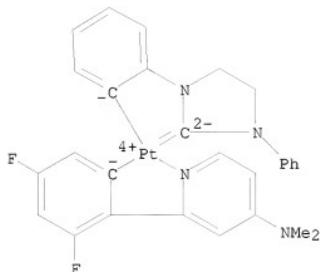
RN 895528-42-4 CAPLUS

CN Platinum, [2-(4-methoxy-2-pyridinyl- κN)-3,5-bis(trifluoromethyl)phenyl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



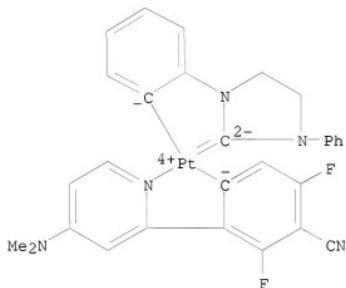
RN 895528-43-5 CAPLUS

CN Platinum, [2-[4-(dimethylamino)-2-pyridinyl- κN]-3,5-difluorophenyl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



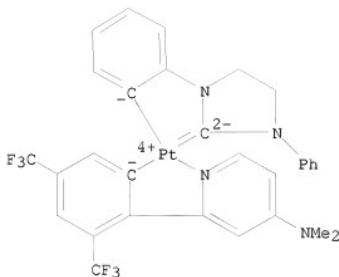
RN 895528-44-6 CAPLUS

CN Platinum, [4-cyano-2-[4-(dimethylamino)-2-pyridinyl- κ N]-3,5-difluorophenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



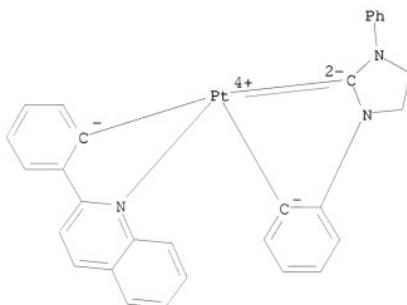
RN 895528-45-7 CAPLUS

CN Platinum, [2-[4-(dimethylamino)-2-pyridinyl- κ N]-3,5-bis(trifluoromethyl)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



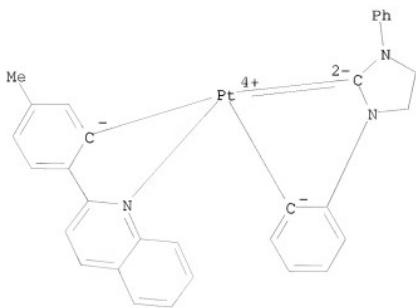
RN 895528-46-8 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(2-quinolinyl-kN)phenyl-kC]- (9CI) (CA INDEX NAME)



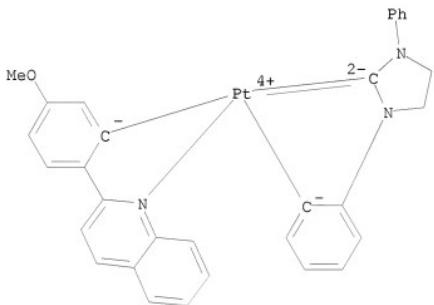
RN 895528-47-9 CAPLUS

CN Platinum, [5-methyl-2-(2-quinolinyl-kN)phenyl-kC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



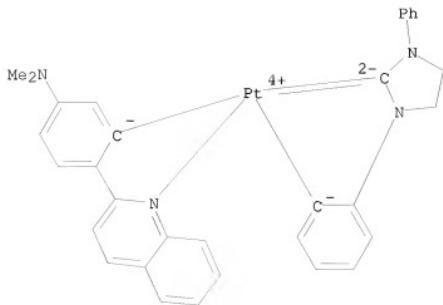
RN 895528-48-0 CAPLUS

CN Platinum, [5-methoxy-2-(2-quinolinyl- κN)phenyl- $\kappa\text{C}] [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)$



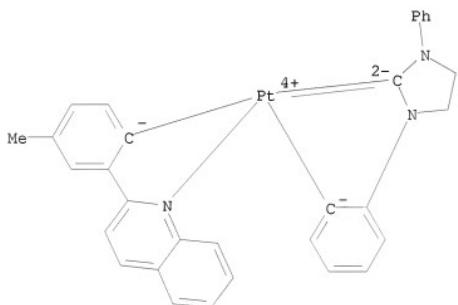
RN 895528-49-1 CAPLUS

CN Platinum, [5-(dimethylamino)-2-(2-quinolinyl- κN)phenyl- $\kappa\text{C}] [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)$



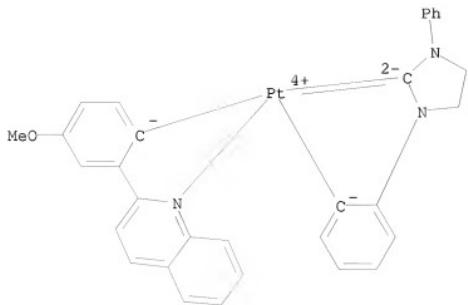
RN 895528-50-4 CAPLUS

CN Platinum, [4-methyl-2-(2-quinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



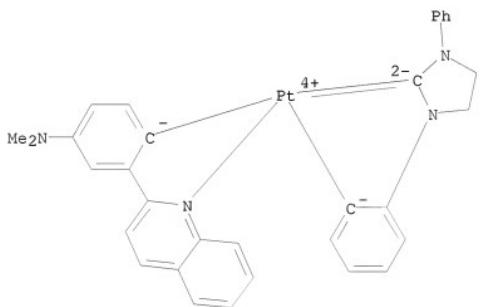
RN 895528-51-5 CAPLUS

CN Platinum, [4-methoxy-2-(2-quinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



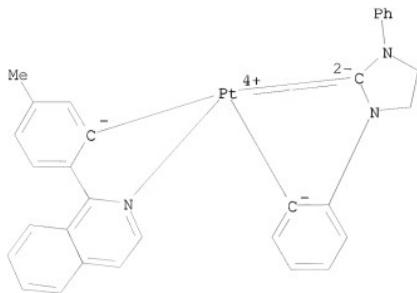
RN 895528-52-6 CAPLUS

CN Platinum, [4-(dimethylamino)-2-(2-quinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



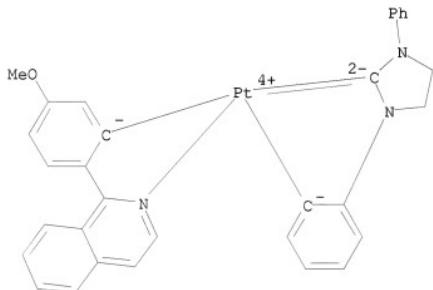
RN 895528-53-7 CAPLUS

CN Platinum, [2-(1-isoquinolinyl- κ N)-5-methylphenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



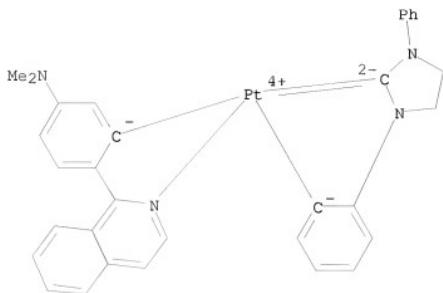
RN 895528-54-8 CAPLUS

CN Platinum, [2-(1-isoquinolinyl- κ N)-5-methoxyphenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



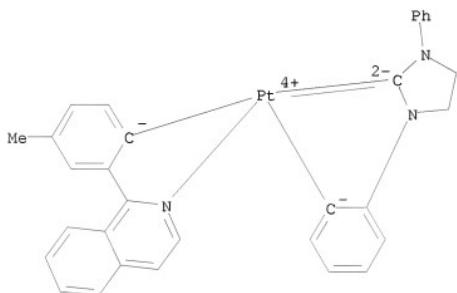
RN 895528-56-0 CAPLUS

CN Platinum, [5-(dimethylamino)-2-(1-isoquinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



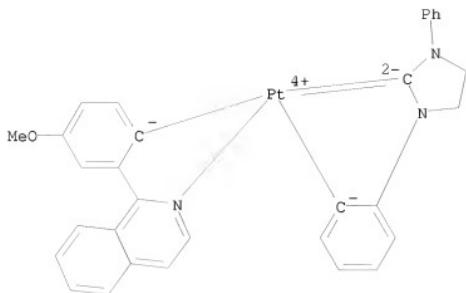
RN 895528-58-2 CAPLUS

CN Platinum, [2-(1-isoquinolinyl- κN)-4-methylphenyl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



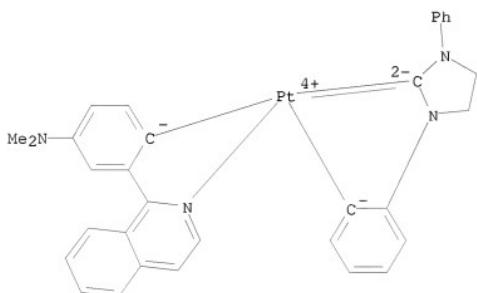
RN 895528-60-6 CAPLUS

CN Platinum, [2-(1-isoquinolinyl- κN)-4-methoxyphenyl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



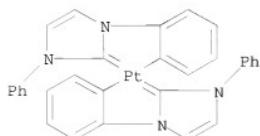
RN 895528-62-8 CAPLUS

CN Platinum, [4-(dimethylamino)-2-(1-isoquinolinyl- κ N)phenyl- κ C] [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

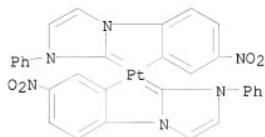


RN 895530-49-1 CAPLUS

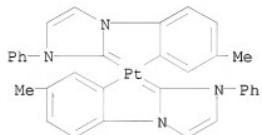
CN Platinum, bis[1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)]- (9CI) (CA INDEX NAME)



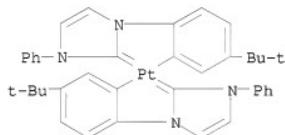
RN 895530-50-4 CAPLUS
CN Platinum, bis[(5-nitro-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



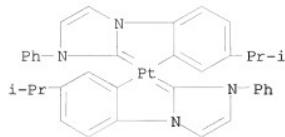
RN 895530-51-5 CAPLUS
CN Platinum, bis[(5-methyl-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



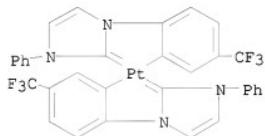
RN 895530-52-6 CAPLUS
CN Platinum, bis[[5-(1,1-dimethylethyl)-1,2-phenylene](3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



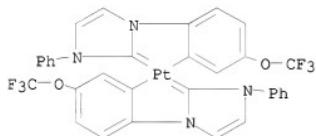
RN 895530-53-7 CAPLUS
CN Platinum, bis[[5-(1-methylethyl)-1,2-phenylene](3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



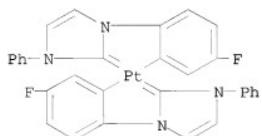
RN 895530-54-8 CAPLUS
CN Platinum, bis[(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene){4-(trifluoromethyl)-1,2-phenylene}]- (9CI) (CA INDEX NAME)



RN 895530-55-9 CAPLUS
CN Platinum, bis[(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene){4-(trifluoromethoxy)-1,2-phenylene}]- (9CI) (CA INDEX NAME)

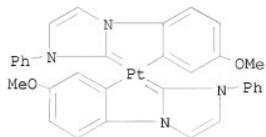


RN 895530-56-0 CAPLUS
CN Platinum, bis[(5-fluoro-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



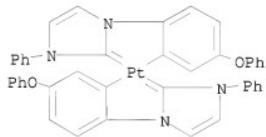
RN 895530-57-1 CAPLUS

CN Platinum, bis[(5-methoxy-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



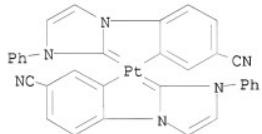
RN 895530-58-2 CAPLUS

CN Platinum, bis[(5-phenoxy-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



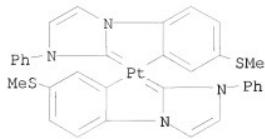
RN 895530-59-3 CAPLUS

CN Platinum, bis[(5-cyano-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

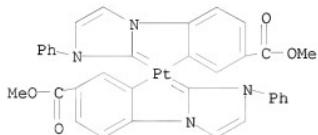


RN 895530-60-6 CAPLUS

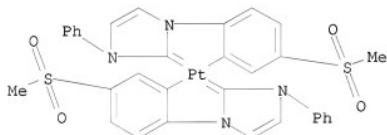
CN Platinum, bis[[(5-(methylthio)-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



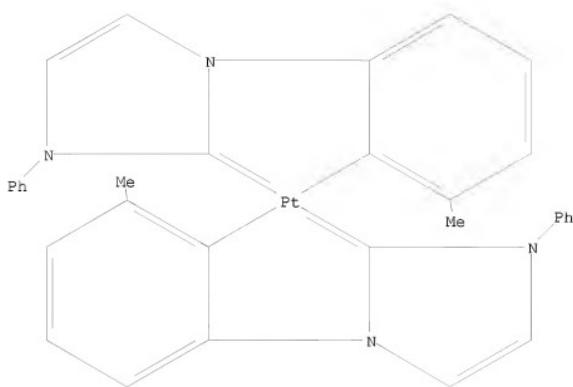
RN 895530-61-7 CAPLUS
CN Platinum, bis[5-(methylsulfonyl)-1,2-phenylene](3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



RN 895530-62-8 CAPLUS
CN Platinum, bis[5-(methoxycarbonyl)-1,2-phenylene](3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

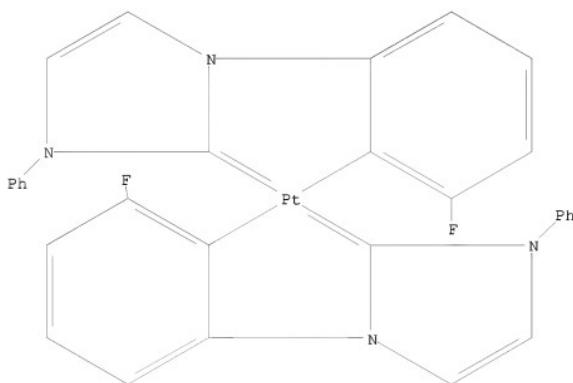


RN 895530-63-9 CAPLUS
CN Platinum, bis[5-(methylsulfonyl)-1,2-phenylene](3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



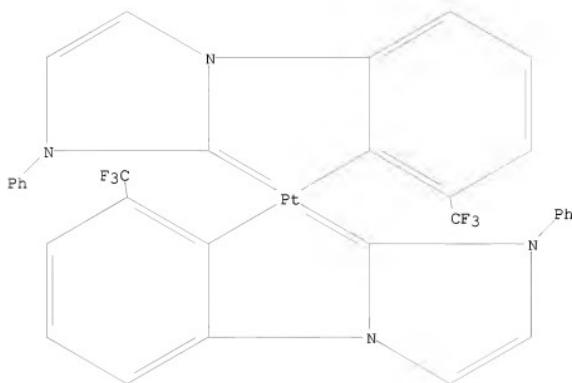
RN 895530-64-0 CAPLUS

CN Platinum, bis[(6-phenyl-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



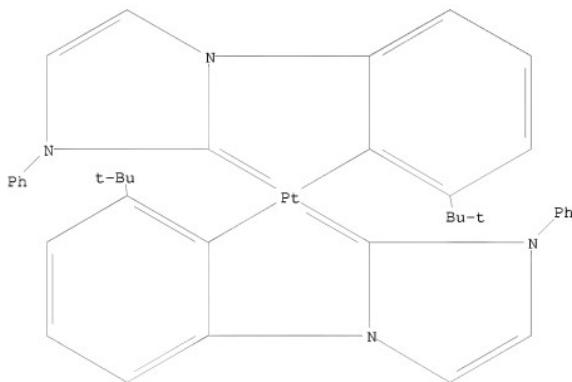
RN 895530-65-1 CAPLUS

CN Platinum, bis[(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene){3-(trifluoromethyl)-1,2-phenylene}]- (9CI) (CA INDEX NAME)



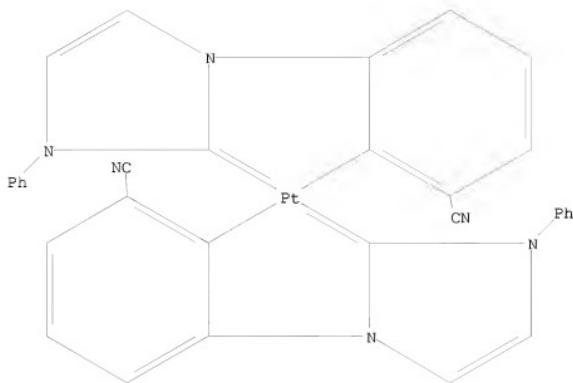
RN 895530-66-2 CAPLUS

CN Platinum, bis[(6-(1,1-dimethylethyl)-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

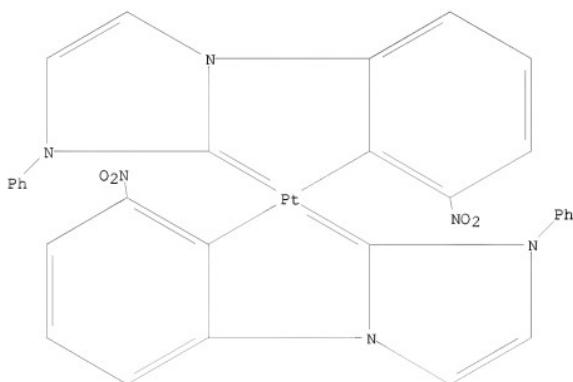


RN 895530-67-3 CAPLUS

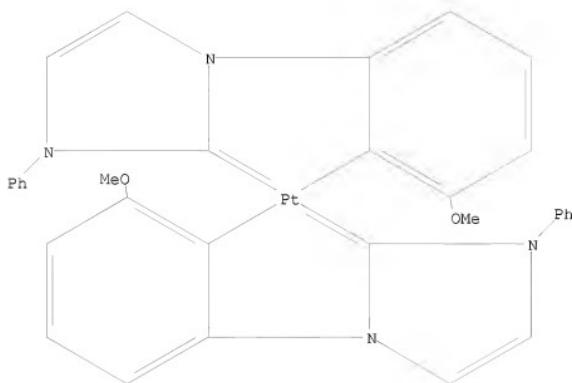
CN Platinum, bis[(6-cyano-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



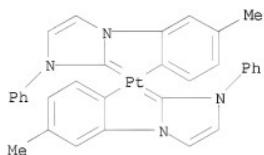
RN 895530-68-4 CAPLUS
CN Platinum, bis[(6-nitro-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



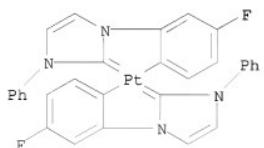
RN 895530-69-5 CAPLUS
CN Platinum, bis[(6-methoxy-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



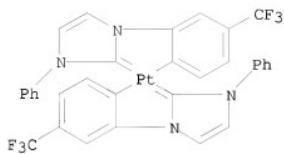
RN 895530-70-8 CAPLUS
CN Platinum, bis[(4-methyl-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



RN 895530-71-9 CAPLUS
CN Platinum, bis[(4-fluoro-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

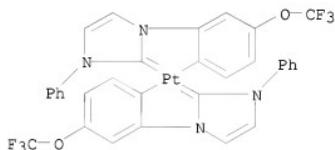


RN 895530-72-0 CAPLUS
CN Platinum, bis[(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)[5-(trifluoromethyl)-1,2-phenylene]]- (9CI) (CA INDEX NAME)



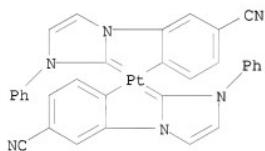
RN 895530-73-1 CAPLUS

CN Platinum, bis[(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene){5-(trifluoromethoxy)-1,2-phenylene}]⁻ (9CI) (CA INDEX NAME)



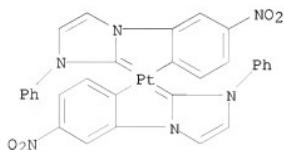
RN 895530-74-2 CAPLUS

CN Platinum, bis[(4-cyano-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]⁻ (9CI) (CA INDEX NAME)

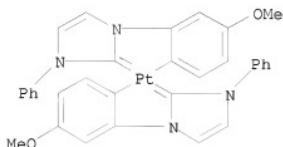


RN 895530-75-3 CAPLUS

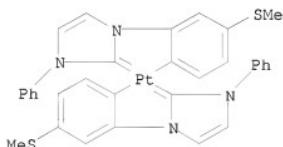
CN Platinum, bis[(4-nitro-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]⁻ (9CI) (CA INDEX NAME)



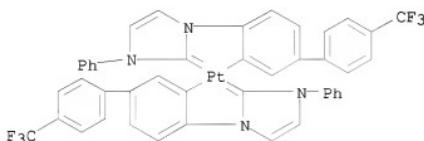
RN 895530-76-4 CAPLUS
CN Platinum, bis[(4-methoxy-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



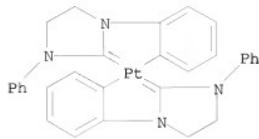
RN 895530-77-5 CAPLUS
CN Platinum, bis[4-(methylthio)-1,2-phenylene](3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



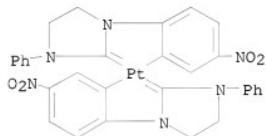
RN 895530-78-6 CAPLUS
CN Platinum, bis[(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)[4'-(trifluoromethyl)[1,1'-biphenyl]-4,3-diyl]]- (9CI) (CA INDEX NAME)



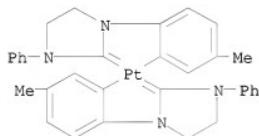
RN 895530-79-7 CAPLUS
CN Platinum, bis[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



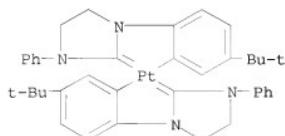
RN 895530-80-0 CAPLUS
CN Platinum, bis[(5-nitro-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895530-81-1 CAPLUS
CN Platinum, bis[(5-methyl-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

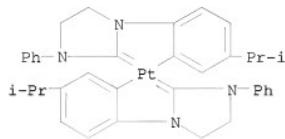


RN 895530-82-2 CAPLUS
CN Platinum, bis[(5-(1,1-dimethylethyl)-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



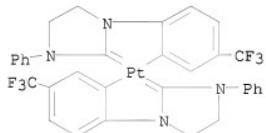
RN 895530-83-3 CAPLUS

CN Platinum, bis[5-(1-methylethyl)-1,2-phenylene](3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



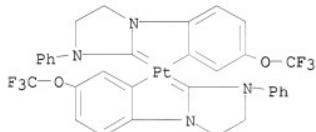
RN 895530-84-4 CAPLUS

CN Platinum, bis[(3-phenyl-1-imidazolidinyl-2-ylidene){4-(trifluoromethyl)-1,2-phenylene}] - (9CI) (CA INDEX NAME)



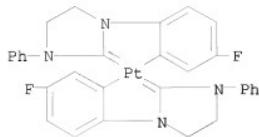
RN 895530-85-5 CAPLUS

CN Platinum, bis[(3-phenyl-1-imidazolidinyl-2-ylidene){4-(trifluoromethoxy)-1,2-phenylene}] - (9CI) (CA INDEX NAME)

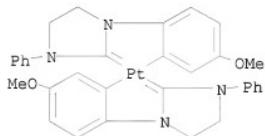


RN 895530-86-6 CAPLUS

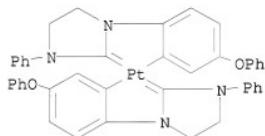
CN Platinum, bis[(5-fluoro-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)] - (9CI) (CA INDEX NAME)



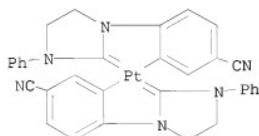
RN 895530-87-7 CAPLUS
CN Platinum, bis(5-methoxy-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895530-88-8 CAPLUS
CN Platinum, bis(5-phenoxy-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

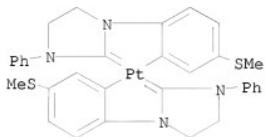


RN 895530-89-9 CAPLUS
CN Platinum, bis(5-cyano-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



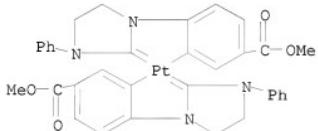
RN 895530-90-2 CAPLUS

CN Platinum, bis[5-(methylthio)-1,2-phenylene](3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



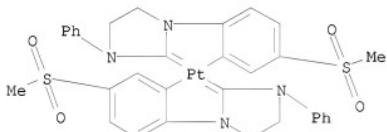
RN 895530-91-3 CAPLUS

CN Platinum, bis[5-(methoxycarbonyl)-1,2-phenylene](3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



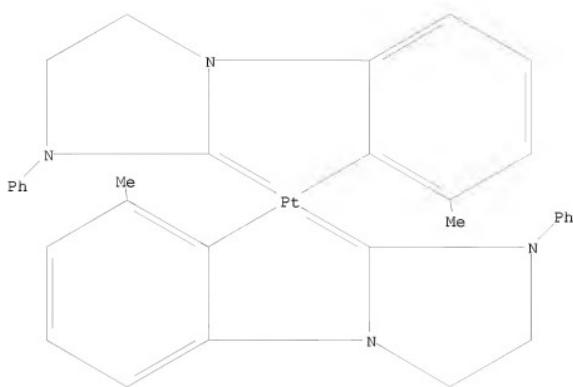
RN 895530-92-4 CAPLUS

CN Platinum, bis[5-(methylsulfonyl)-1,2-phenylene](3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



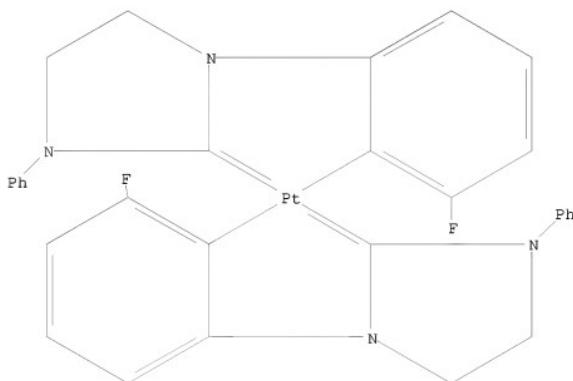
RN 895530-93-5 CAPLUS

CN Platinum, bis[(6-methyl-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



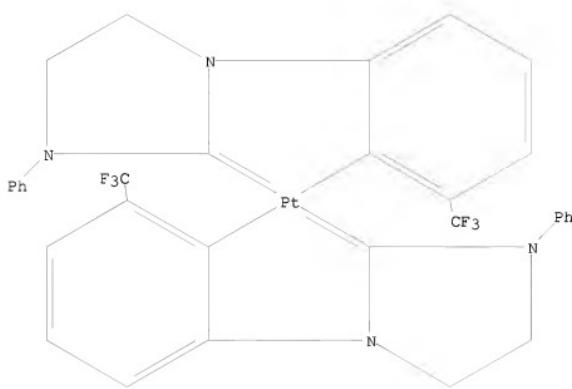
RN 895530-94-6 CAPLUS

CN Platinum, bis[(6-fluoro-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

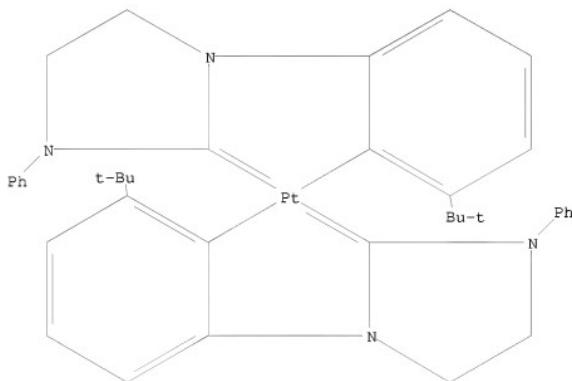


RN 895530-95-7 CAPLUS

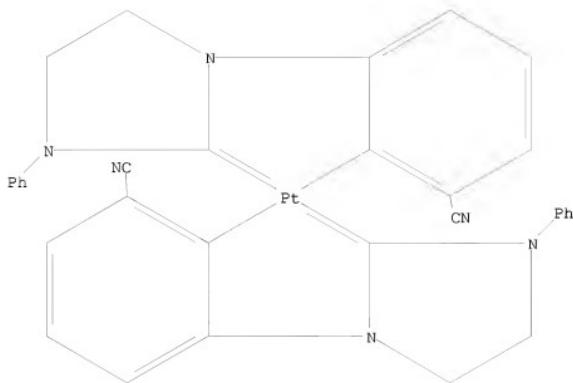
CN Platinum, bis[(3-phenyl-1-imidazolidinyl-2-ylidene)[3-(trifluoromethyl)-1,2-phenylene]]- (9CI) (CA INDEX NAME)



RN 895530-96-8 CAPLUS
CN Platinum, bis[(6-(1,1-dimethylethyl)-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

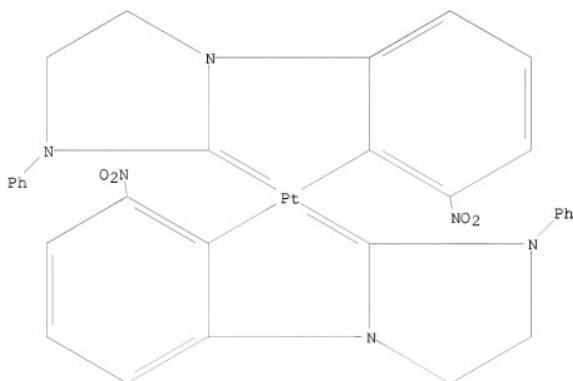


RN 895530-97-9 CAPLUS
CN Platinum, bis[(6-cyano-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



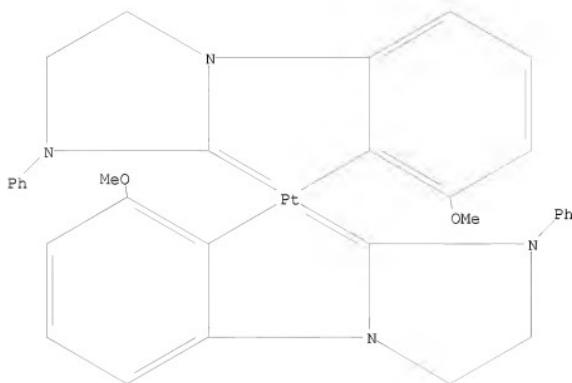
RN 895530-98-0 CAPLUS

CN Platinum, bis[(6-nitro-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



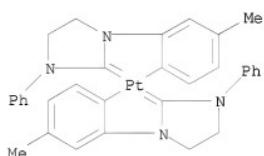
RN 895530-99-1 CAPLUS

CN Platinum, bis[(6-methoxy-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



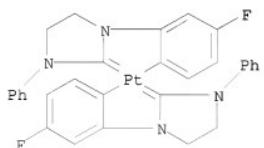
RN 895531-00-7 CAPLUS

CN Platinum, bis[(4-methyl-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



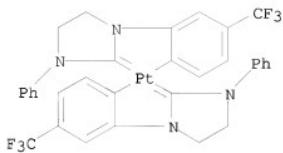
RN 895531-01-8 CAPLUS

CN Platinum, bis[(4-fluoro-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



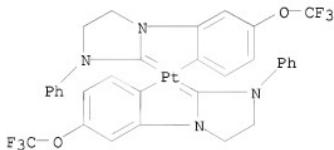
RN 895531-02-9 CAPLUS

CN Platinum, bis[(3-phenyl-1-imidazolidinyl-2-ylidene){5-(trifluoromethyl)-1,2-phenylene}] - (9CI) (CA INDEX NAME)



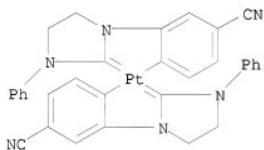
RN 895531-03-0 CAPLUS

CN Platinum, bis[(3-phenyl-1-imidazolidinyl-2-ylidene){5-(trifluoromethoxy)-1,2-phenylene}]- (9CI) (CA INDEX NAME)



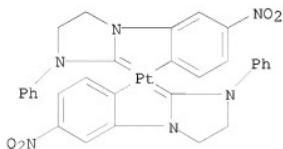
RN 895531-04-1 CAPLUS

CN Platinum, bis[(4-cyano-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



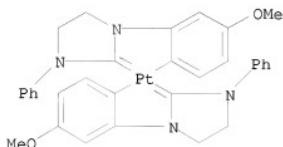
RN 895531-05-2 CAPLUS

CN Platinum, bis[(4-nitro-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



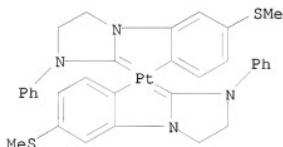
RN 895531-06-3 CAPLUS

CN Platinum, bis[(4-methoxy-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



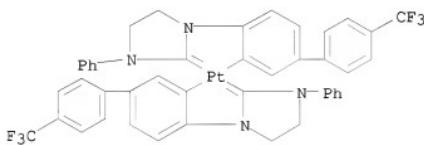
RN 895531-07-4 CAPLUS

CN Platinum, bis[[4-(methylthio)-1,2-phenylene](3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



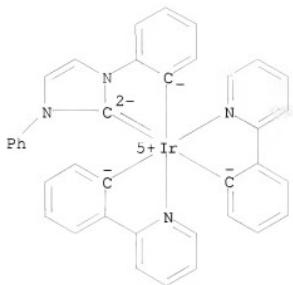
RN 895531-08-5 CAPLUS

CN Platinum, bis[(3-phenyl-1-imidazolidinyl-2-ylidene)[4'-(trifluoromethyl)[1,1'-biphenyl]-4,3-diyl]]- (9CI) (CA INDEX NAME)



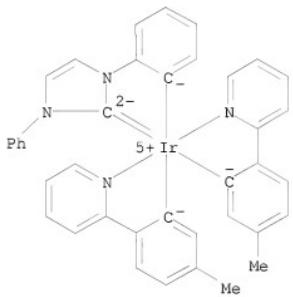
RN 895551-13-0 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis(2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



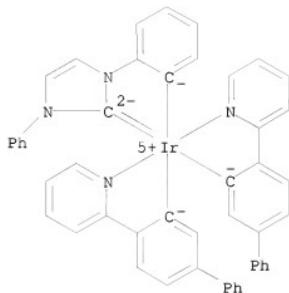
RN 895551-14-1 CAPLUS

CN Iridium, bis[5-methyl-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



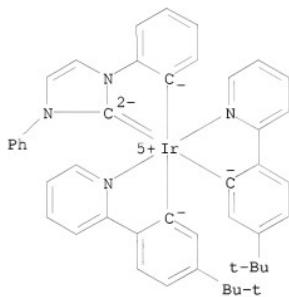
RN 895551-15-2 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[4-(2-pyridinyl- κ N){1,1'-biphenyl}-3-yl- κ C]- (9CI) (CA INDEX NAME)



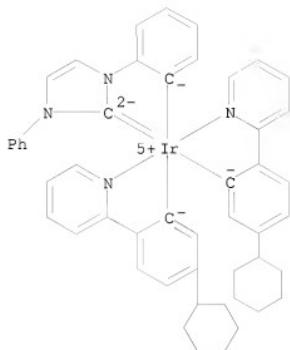
RN 895551-16-3 CAPLUS

CN Iridium, bis[5-(1,1-dimethylethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



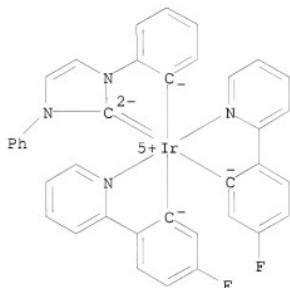
RN 895551-17-4 CAPLUS

CN Iridium, bis[5-cyclohexyl-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



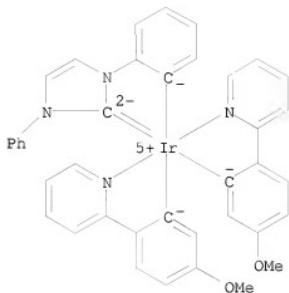
RN 895551-18-5 CAPLUS

CN Iridium, bis[5-fluoro-2-(2-pyridinyl-kN)phenyl-kC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



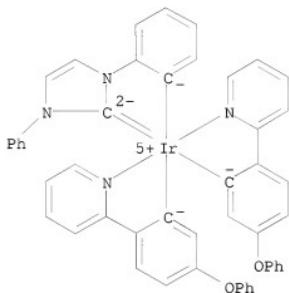
RN 895551-19-6 CAPLUS

CN Iridium, bis[5-methoxy-2-(2-pyridinyl-kN)phenyl-kC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



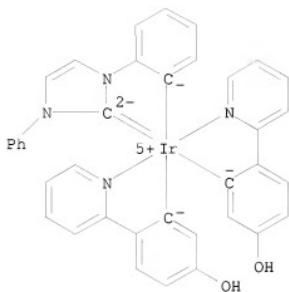
RN 895551-20-9 CAPLUS

CN Iridium, bis[5-phenoxy-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



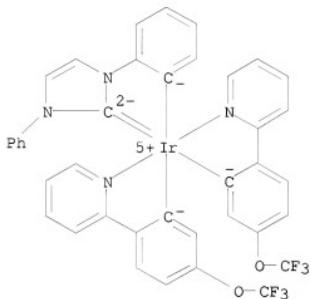
RN 895551-21-0 CAPLUS

CN Iridium, bis[5-hydroxy-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



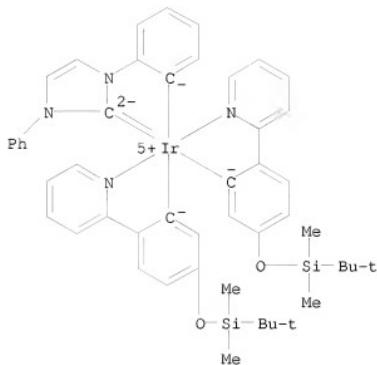
RN 895551-22-1 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(2-pyridinyl-κN)-5-(trifluoromethoxy)phenyl-κC]- (9CI) (CA INDEX NAME)



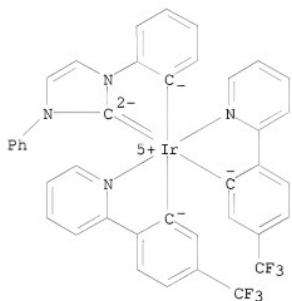
RN 895551-23-2 CAPLUS

CN Iridium, bis[5-[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-(2-pyridinyl-κN)phenyl-κC]-[1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



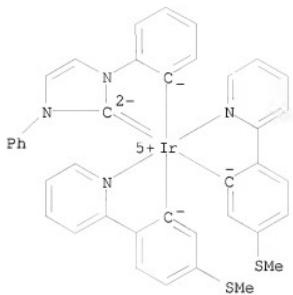
RN 895551-24-3 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis(2-(2-pyridinyl-κN)-5-(trifluoromethyl)phenyl-κC]- (9CI) (CA INDEX NAME)



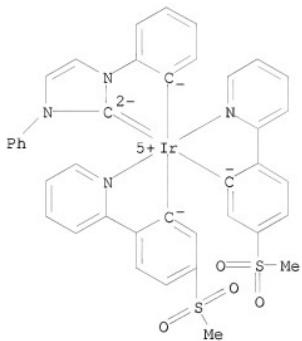
RN 895551-25-4 CAPLUS

CN Iridium, bis[5-(methylthio)-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



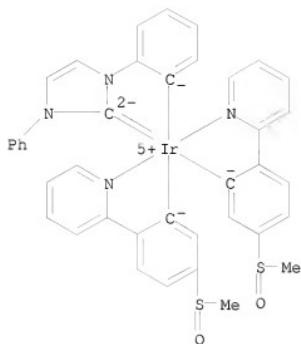
RN 895551-26-5 CAPLUS

CN Iridium, bis[5-(methylsulfonyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



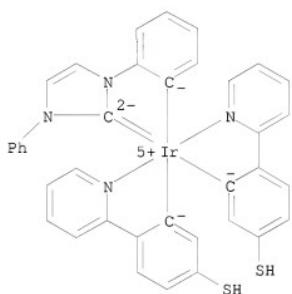
RN 895551-27-6 CAPLUS

CN Iridium, bis[5-(methylsulfinyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



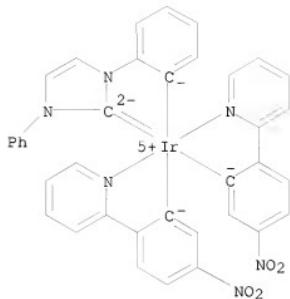
RN 895551-28-7 CAPLUS

CN Iridium, bis[5-mercaptop-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



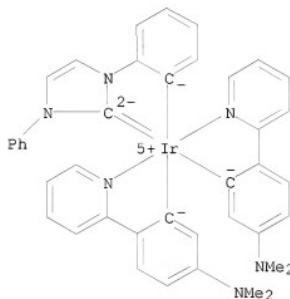
RN 895551-29-8 CAPLUS

CN Iridium, bis[5-nitro-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



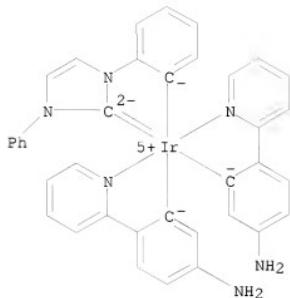
RN 895551-30-1 CAPLUS

CN Iridium, bis[5-(dimethylamino)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



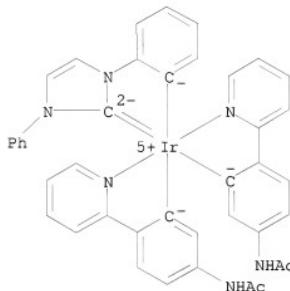
RN 895551-31-2 CAPLUS

CN Iridium, bis[5-amino-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



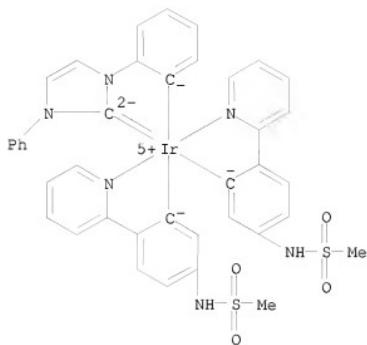
RN 895551-32-3 CAPLUS

CN Iridium, bis[5-(acetylamino)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



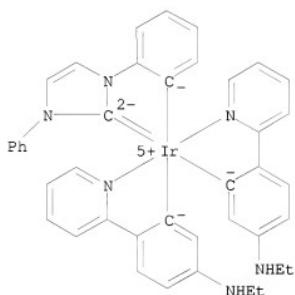
RN 895551-33-4 CAPLUS

CN Iridium, bis[5-[(methylsulfonyl)amino]-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



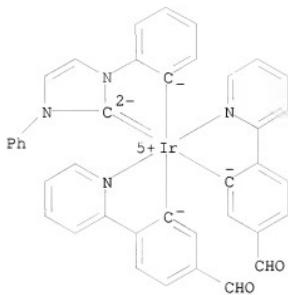
RN 895551-34-5 CAPLUS

CN Iridium, bis[5-(ethylamino)-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



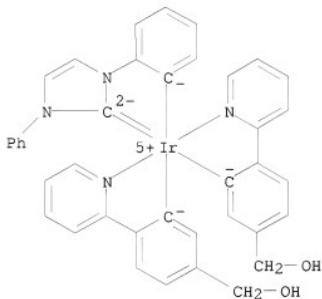
RN 895551-35-6 CAPLUS

CN Iridium, bis[5-formyl-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



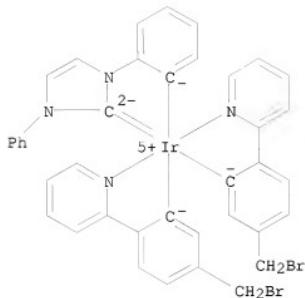
RN 895551-36-7 CAPLUS

CN Iridium, bis[5-(hydroxymethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)

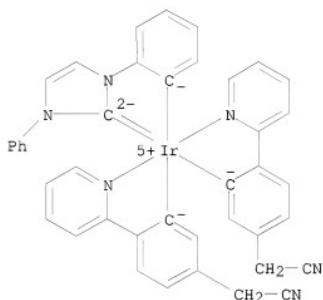


RN 895551-37-8 CAPLUS

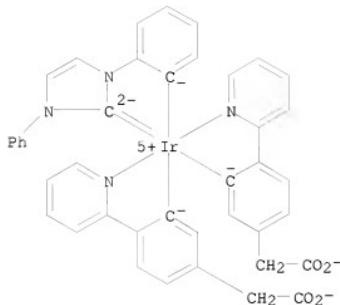
CN Iridium, bis[5-(bromomethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



RN 895551-38-9 CAPLUS
CN Iridium, bis[5-(cyanomethyl)-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



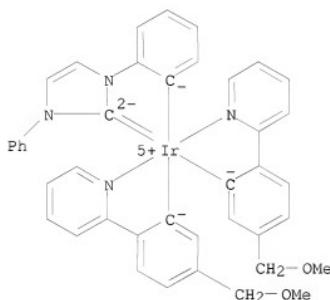
RN 895551-39-0 CAPLUS
CN Iridate(2-), bis[5-(carboxylatomethyl)-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]-, dihydrogen (9CI) (CA INDEX NAME)



● 2 H⁺

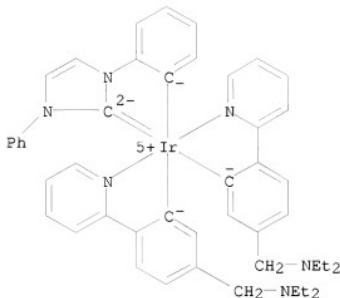
RN 895551-40-3 CAPLUS

CN Iridium, bis[5-(methoxymethyl)-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



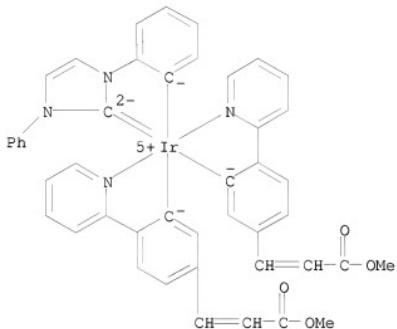
RN 895551-41-4 CAPLUS

CN Iridium, bis[5-[(diethylamino)methyl]-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



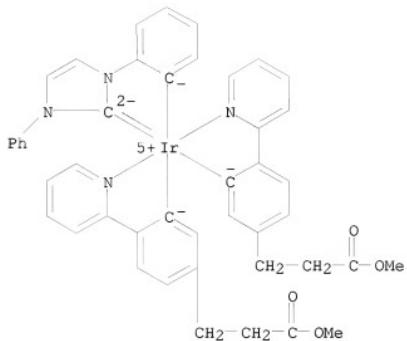
RN 895551-42-5 CAPLUS

CN Iridium, bis[5-(3-methoxy-3-oxo-1-propenyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



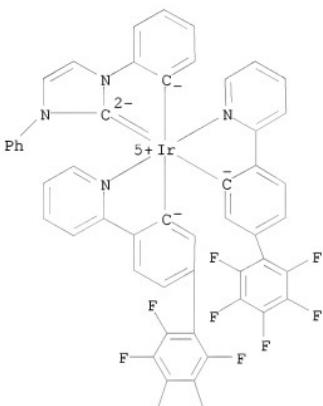
RN 895551-43-6 CAPLUS

CN Iridium, bis[5-(3-methoxy-3-oxopropyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



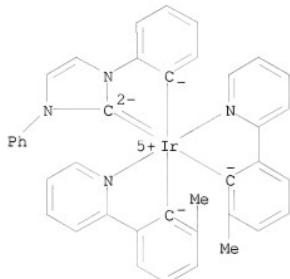
RN 895551-44-7 CAPLUS
CN Iridium, bis[2',3',4',5',6'-pentafluoro-4-(2-pyridinyl- κ N){1,1'-biphenyl}-3-yl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A

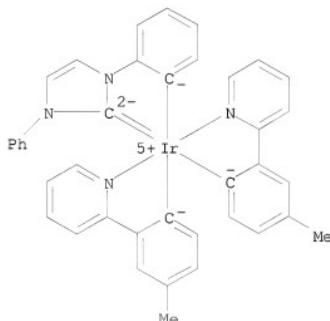




RN 895551-45-8 CAPLUS
 CN Iridium, bis[2-methyl-6-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)

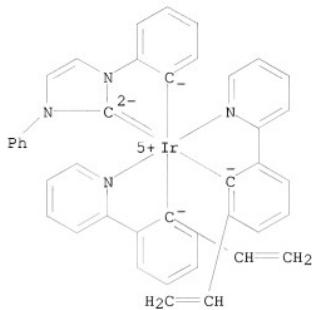


RN 895551-46-9 CAPLUS
 CN Iridium, bis[4-methyl-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



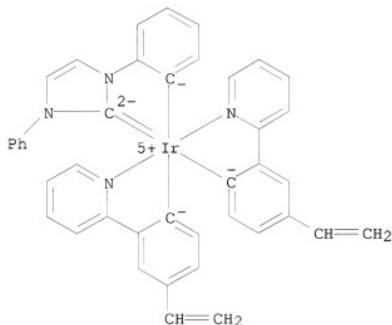
RN 895551-47-0 CAPLUS
 CN Iridium, bis[2-ethenyl-6-(2-pyridinyl- κ N)phenyl- κ C]{1,2-

phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



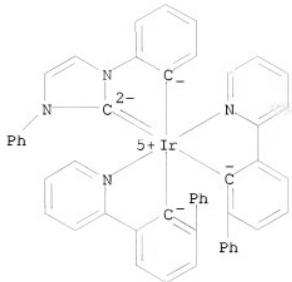
RN 895551-48-1 CAPLUS

CN Iridium, bis[4-ethenyl-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



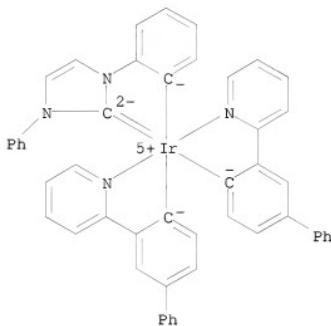
RN 895551-49-2 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[3-(2-pyridinyl-κN)(1,1'-biphenyl)-2-yl-κC]- (9CI) (CA INDEX NAME)



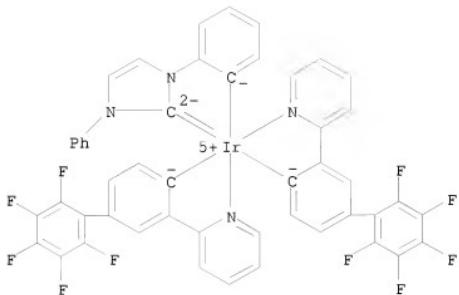
RN 895551-50-5 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[3-(2-pyridinyl- κ N){1,1'-biphenyl}-4-yl- κ C]- (9CI) (CA INDEX NAME)



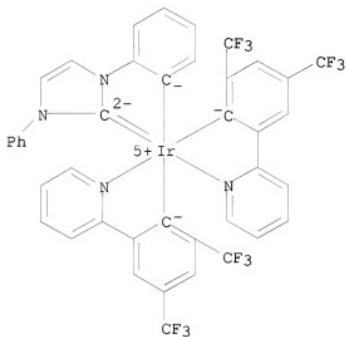
RN 895551-51-6 CAPLUS

CN Iridium, bis[2',3',4',5',6'-pentafluoro-3-(2-pyridinyl- κ N){1,1'-biphenyl}-4-yl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



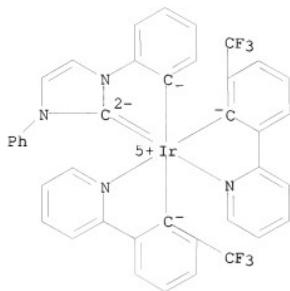
RN 895551-52-7 CAPLUS

CN Iridium, [1, 2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(2-pyridinyl- κ N)-4, 6-bis(trifluoromethyl)phenyl- κ C]- (9CI) (CA INDEX NAME)



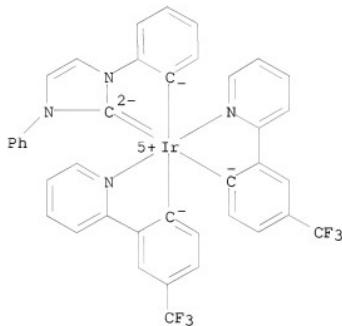
RN 895551-53-8 CAPLUS

CN Iridium, [1, 2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(2-pyridinyl- κ N)-6-(trifluoromethyl)phenyl- κ C]- (9CI) (CA INDEX NAME)



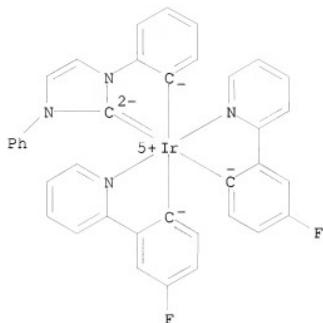
RN 895551-54-9 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(2-pyridinyl- κ N)-4-(trifluoromethyl)phenyl- κ C]- (9CI) (CA INDEX NAME)



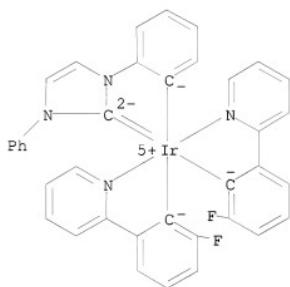
RN 895551-55-0 CAPLUS

CN Iridium, bis[4-fluoro-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



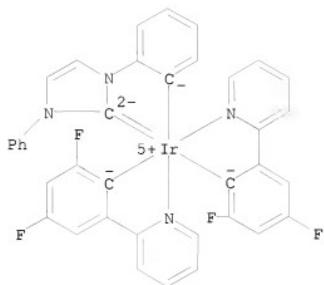
RN 895551-56-1 CAPLUS

CN Iridium, bis[2-fluoro-6-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



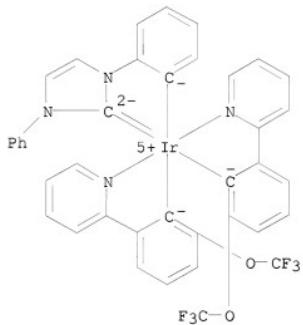
RN 895551-57-2 CAPLUS

CN Iridium, bis[2,4-difluoro-6-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



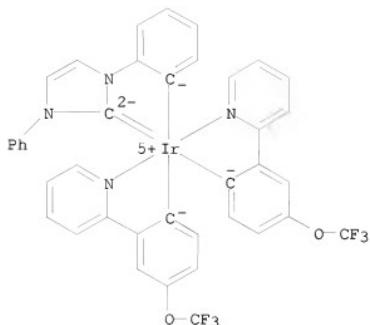
RN 895551-58-3 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(2-pyridinyl- κ N)-6-(trifluoromethoxy)phenyl- κ C]- (9CI) (CA INDEX NAME)



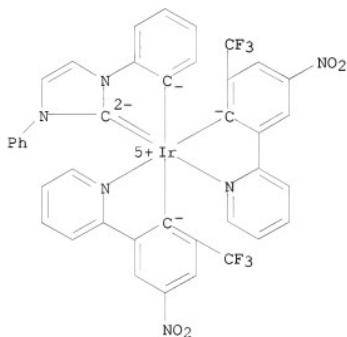
RN 895551-59-4 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis(2-(2-pyridinyl- κ N)-4-(trifluoromethoxy)phenyl- κ C]- (9CI) (CA INDEX NAME)



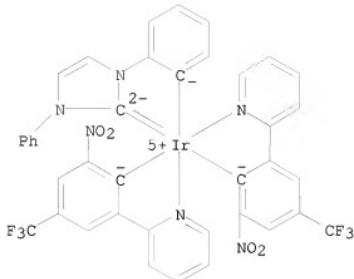
RN 895551-60-7 CAPLUS

CN Iridium, bis[4-nitro-2-(2-pyridinyl- κ N)-6-(trifluoromethyl)phenyl- κ C] [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



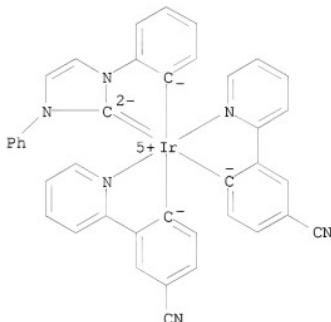
RN 895551-61-8 CAPLUS

CN Iridium, bis[2-nitro-6-(2-pyridinyl- κ N)-4-(trifluoromethyl)phenyl- κ C] [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



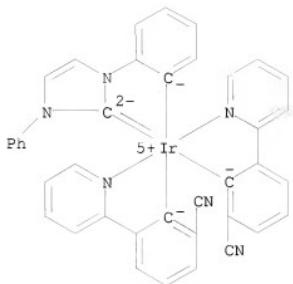
RN 895551-62-9 CAPLUS

CN Iridium, bis[4-cyano-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



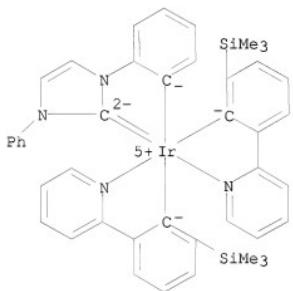
RN 895551-63-0 CAPLUS

CN Iridium, bis[2-cyano-6-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



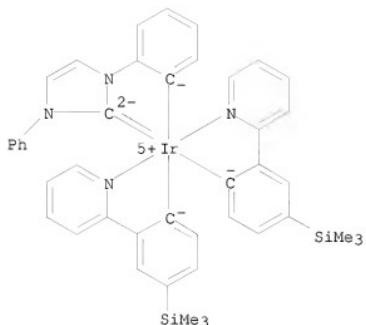
RN 895551-64-1 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(2-pyridinyl- κ N)-6-(trimethylsilyl)phenyl- κ C]- (9CI) (CA INDEX NAME)



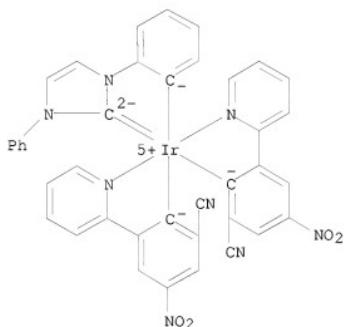
RN 895551-65-2 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(2-pyridinyl- κ N)-4-(trimethylsilyl)phenyl- κ C]- (9CI) (CA INDEX NAME)



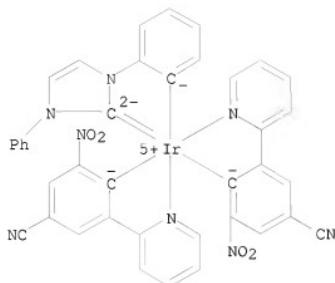
RN 895551-66-3 CAPLUS

CN Iridium, bis[2-cyano-4-nitro-6-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

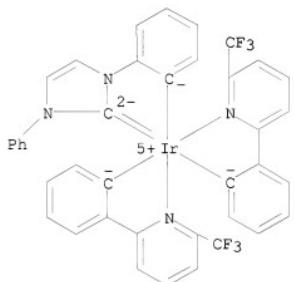


RN 895551-67-4 CAPLUS

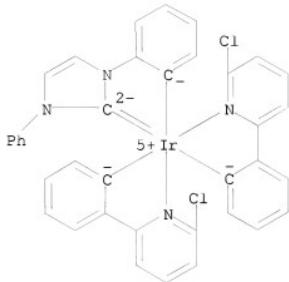
CN Iridium, bis[4-cyano-2-nitro-6-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



RN 895551-68-5 CAPLUS
CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(6-(trifluoromethyl)-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)

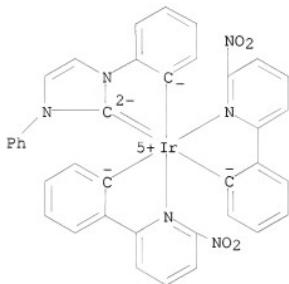


RN 895551-69-6 CAPLUS
CN Iridium, bis[2-(6-chloro-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



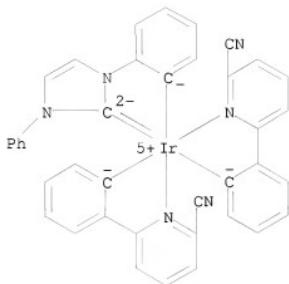
RN 895551-70-9 CAPLUS

CN Iridium, bis[2-(6-nitro-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



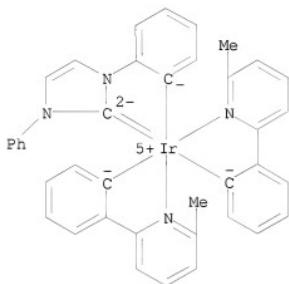
RN 895551-71-0 CAPLUS

CN Iridium, bis[2-(6-cyano-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



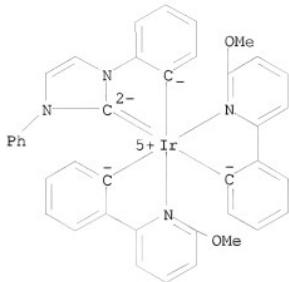
RN 895551-72-1 CAPLUS

CN Iridium, bis[2-(6-methyl-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



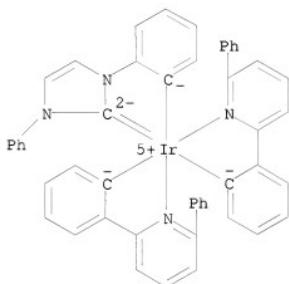
RN 895551-73-2 CAPLUS

CN Iridium, bis[2-(6-methoxy-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



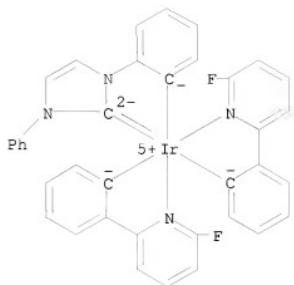
RN 895551-74-3 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(6-phenyl-2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)

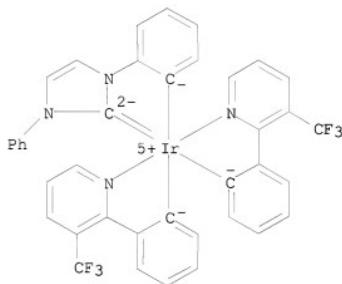


BN 895551-75-4 CAPLUS

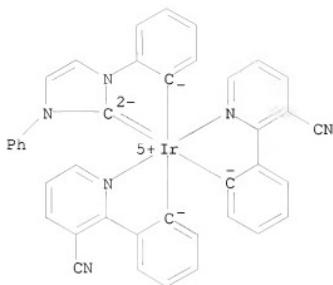
CN Iridium, bis[2-(6-fluoro-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



RN 895551-76-5 CAPLUS
CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(3-(trifluoromethyl)-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)

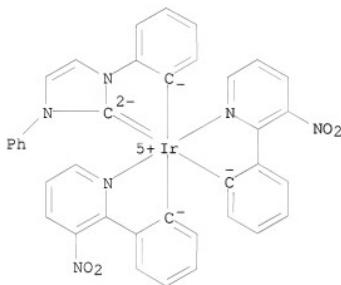


RN 895551-77-6 CAPLUS
CN Iridium, bis[2-(3-cyano-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



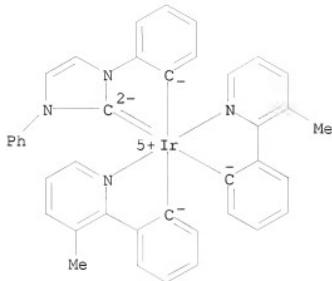
RN 895551-78-7 CAPLUS

CN Iridium, bis[2-(3-nitro-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



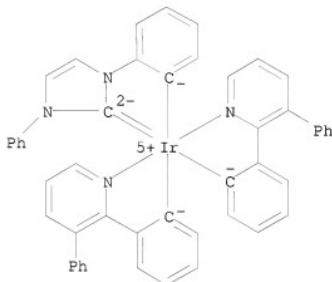
RN 895551-79-8 CAPLUS

CN Iridium, bis[2-(3-methyl-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



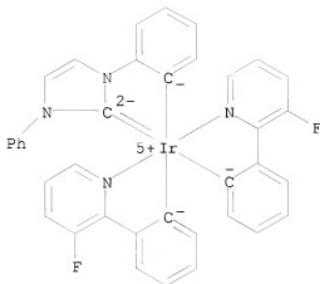
RN 895551-80-1 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(3-phenyl-2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)



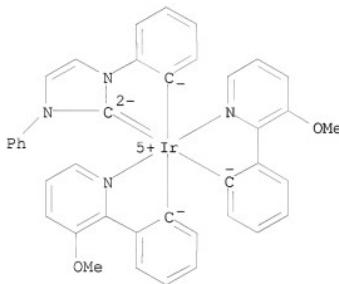
RN 895551-81-2 CAPLUS

CN Iridium, bis[2-(3-fluoro-2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



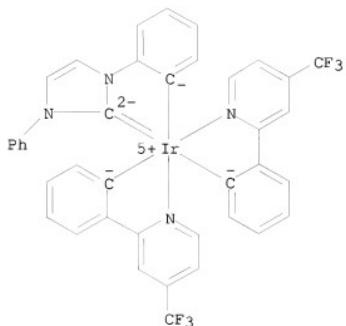
RN 895551-82-3 CAPLUS

CN Iridium, bis[2-(3-methoxy-2-pyridinyl-κN)phenyl-κC]{[1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]-} (9CI) (CA INDEX NAME)



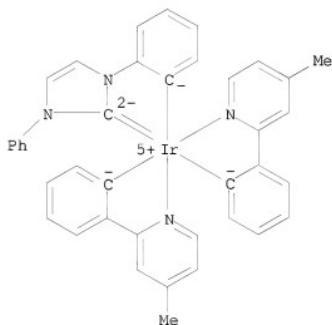
RN 895551-83-4 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-[4-(trifluoromethyl)-2-pyridinyl-κN]phenyl-κC]- (9CI) (CA INDEX NAME)



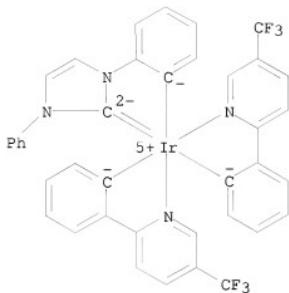
RN 895551-84-5 CAPLUS

CN Iridium, bis[2-(4-methyl-2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



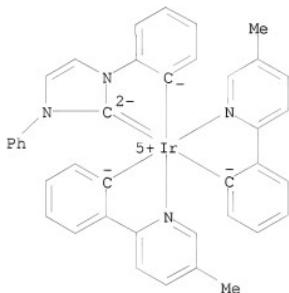
RN 895551-85-6 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(5-(trifluoromethyl)-2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)



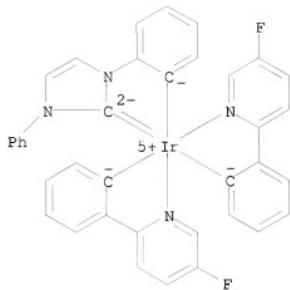
RN 895551-86-7 CAPLUS

CN Iridium, bis[2-(5-methyl-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



RN 895551-87-8 CAPLUS

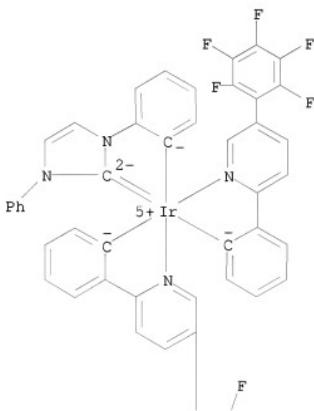
CN Iridium, bis[2-(5-fluoro-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)

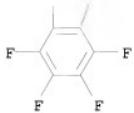


RN 895551-88-9 CAPLUS

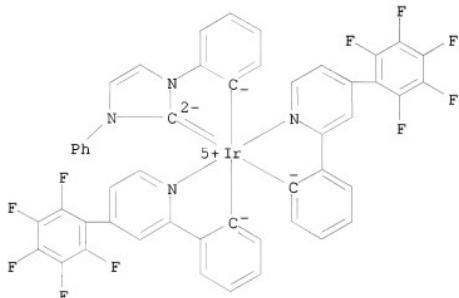
CN Iridium, bis[2-[5-(pentafluorophenyl)-2-pyridinyl-kN]phenyl-kC]-[1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)

PAGE 1-A

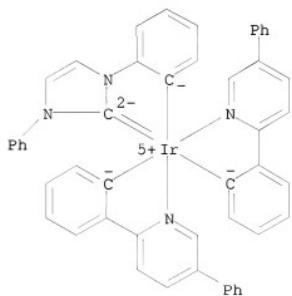




RN 895551-89-0 CAPLUS

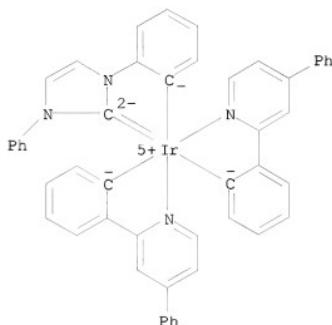
CN Iridium, bis[2-[4-(pentafluorophenyl)-2-pyridinyl- κ N]phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)

RN 895551-90-3 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(5-phenyl-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)

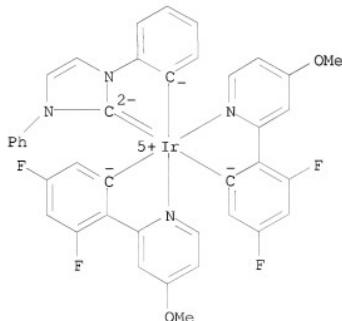
RN 895551-91-4 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(4-phenyl-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



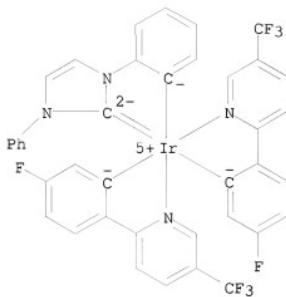
RN 895551-92-5 CAPLUS

CN Iridium, bis[3,5-difluoro-2-(4-methoxy-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



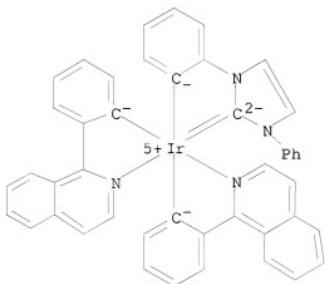
RN 895551-93-6 CAPLUS

CN Iridium, bis[5-fluoro-2-[5-(trifluoromethyl)-2-pyridinyl- κ N]phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



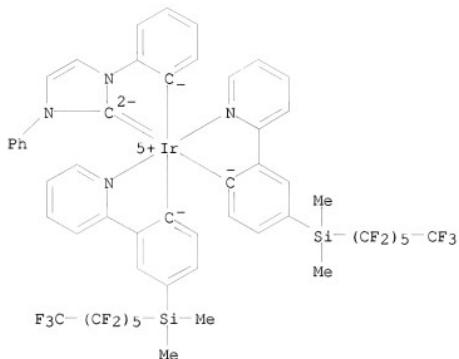
RN 895551-94-7 CAPLUS

CN Iridium, bis[2-(1-isoquinolinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]⁻ (9CI) (CA INDEX NAME)



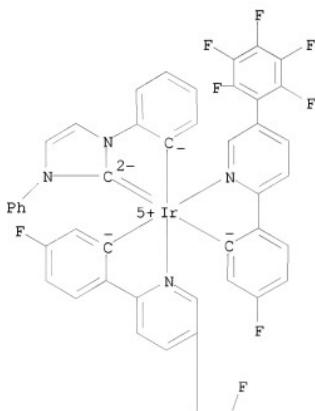
RN 895551-95-8 CAPLUS

CN Iridium, bis[4-[dimethyl(tridecafluorohexyl)silyl]-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]⁻ (9CI) (CA INDEX NAME)

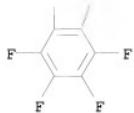


RN 895551-97-0 CAPLUS
CN Iridium, bis[5-fluoro-2-[5-(pentafluorophenyl)-2-pyridinyl-κN]phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)

PAGE 1-A



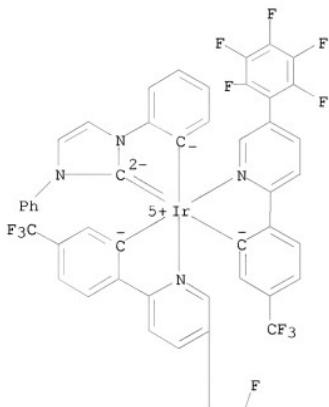
PAGE 2-A



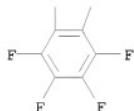
RN 895551-98-1 CAPLUS

CN Iridium, bis[2-[5-(pentafluorophenyl)-2-pyridinyl- κ N]-5-(trifluoromethyl)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

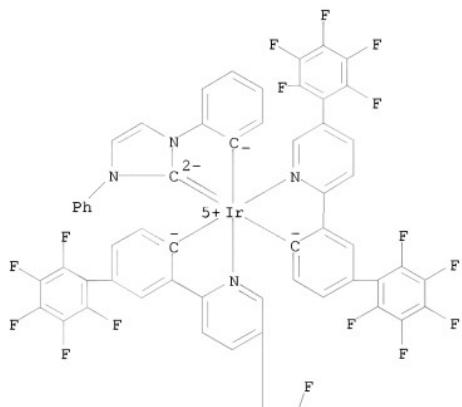


RN 895552-00-8 CAPLUS

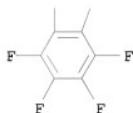
CN Iridium, bis[2',3',4',5',6'-pentafluoro-3-[5-(pentafluorophenyl)-2-pyridinyl- κ N][1,1'-biphenyl]-4-yl- κ C][1,2-phenylene(3-phenyl-

1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A



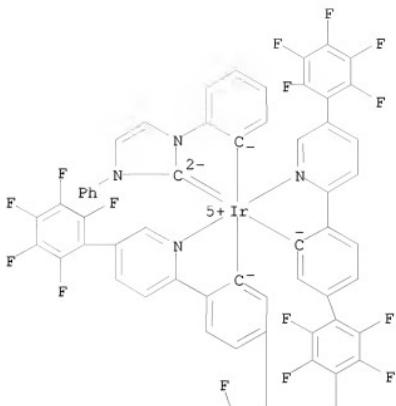
PAGE 2-A



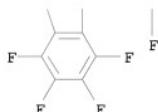
RN 895552-02-0 CAPLUS

CN Iridium, bis[2',3',4',5',6'-pentafluoro-4-[5-(pentafluorophenyl)-2-pyridinyl-κN][1,1'-biphenyl]-3-yl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A



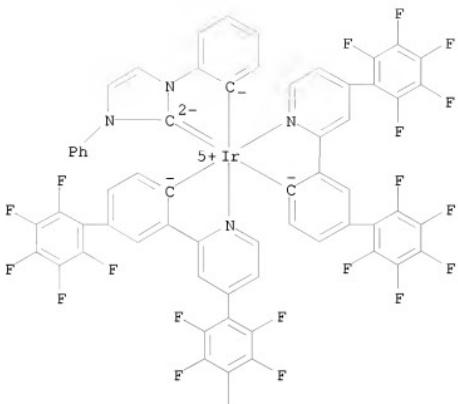
PAGE 2-A



RN 895552-04-2 CAPLUS

CN Iridium, bis[2',3',4',5',6'-pentafluoro-3-[4-(pentafluorophenyl)-2-pyridinyl-κN][1,1'-biphenyl]-4-yl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A



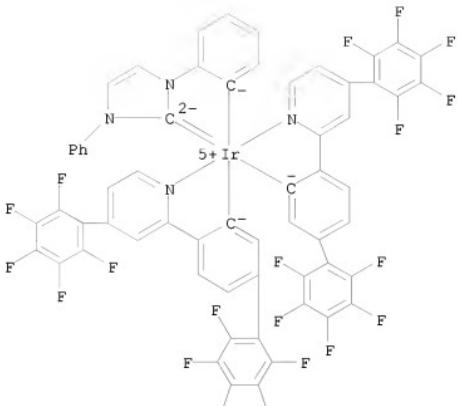
PAGE 2-A

|
F

RN 895552-05-3 CAPLUS

CN Iridium, bis[2',3',4',5',6'-pentafluoro-4-[4-(pentafluorophenyl)-2-pyridinyl-κN][1,1'-biphenyl]-3-yl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A

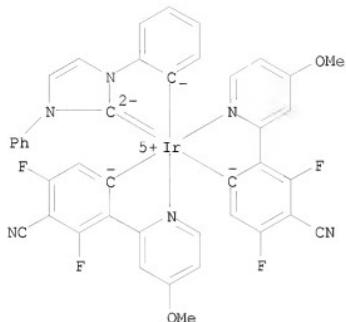


PAGE 2-A



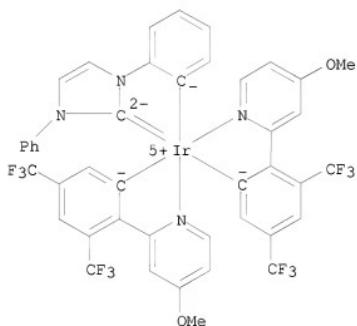
RN 895552-07-5 CAPLUS

CN Iridium, bis[4-cyano-3,5-difluoro-2-(4-methoxy-2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



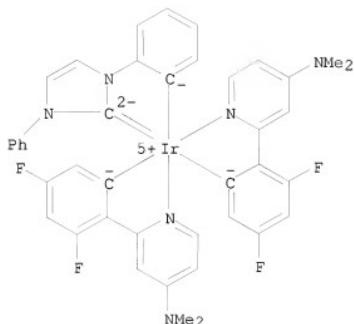
RN 895552-09-7 CAPLUS

CN Iridium, bis[2-(4-methoxy-2-pyridinyl- κ N)-3,5-bis(trifluoromethyl)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



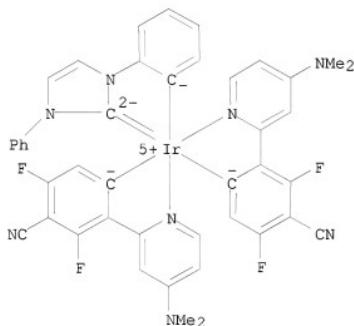
RN 895552-11-1 CAPLUS

CN Iridium, bis[2-[4-(dimethylamino)-2-pyridinyl- κ N]-3,5-difluorophenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



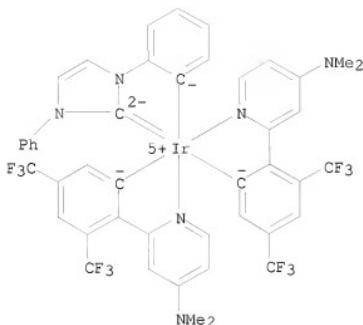
RN 895552-13-3 CAPLUS

CN Iridium, bis[4-cyano-2-[4-(dimethylamino)-2-pyridinyl-κN]-3,5-difluorophenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



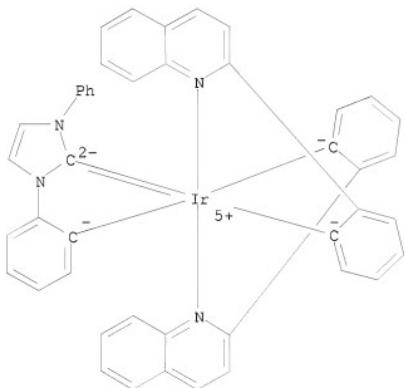
RN 895552-15-5 CAPLUS

CN Iridium, bis[2-[4-(dimethylamino)-2-pyridinyl-κN]-3,5-bis(trifluoromethyl)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



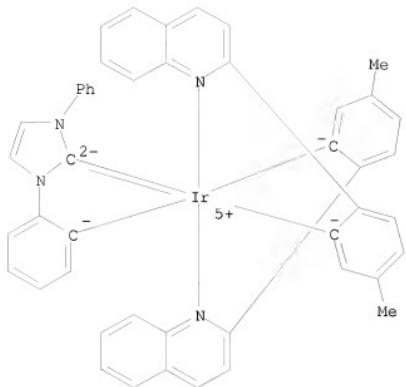
RN 895552-17-7 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[2-(2-quinolinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



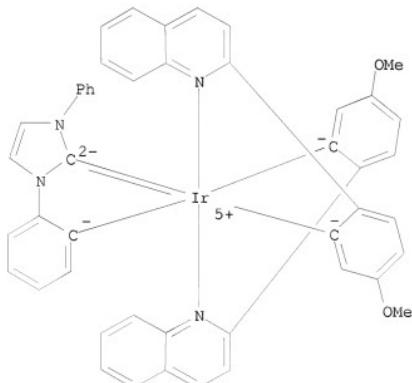
RN 895552-18-8 CAPLUS

CN Iridium, bis[5-methyl-2-(2-quinolinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



RN 895552-19-9 CAPLUS

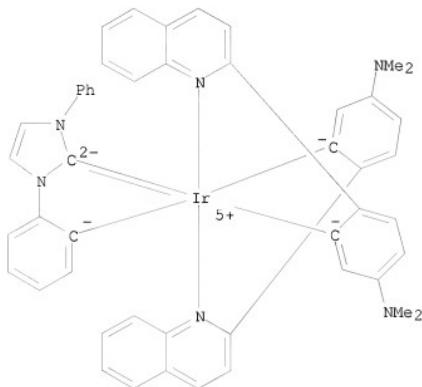
CN Iridium, bis[5-methoxy-2-(2-quinolinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



RN 895552-20-2 CAPLUS

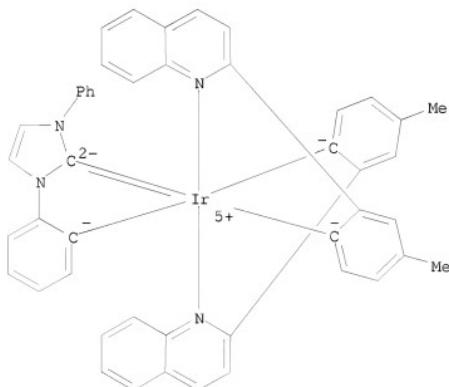
CN Iridium, bis[5-(dimethylamino)-2-(2-quinolinyl- κ N)phenyl-

κC] [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)

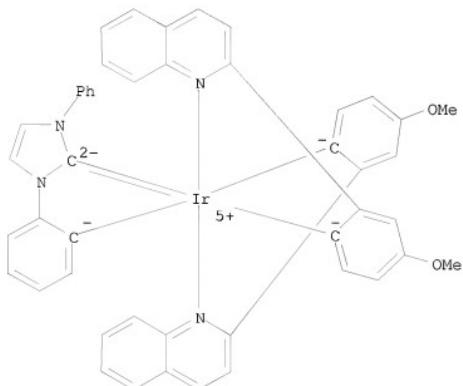


RN 89552-21-3 CAPLUS

CN Iridium, bis[4-methyl-2-(2-quinolinyl-kN)phenyl-kC] [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



RN 895552-22-4 CAPLUS

CN Iridium, bis[4-methoxy-2-(2-quinolinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)

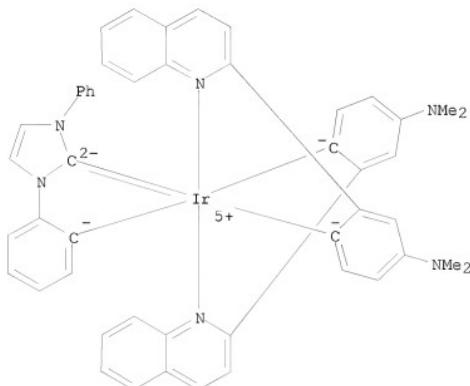
IT 895552-23-5 895552-24-6 895552-25-7
 895552-26-8 895552-27-9 895552-28-0
 895552-29-1 895552-30-4 895552-31-5
 895552-32-6 895552-33-7 895552-34-8
 895552-35-9 895552-36-0 895552-37-1
 895552-38-2 895552-39-3 895552-40-6
 895552-41-7 895552-42-8 895552-43-9
 895552-44-0 895552-45-1 895552-46-2
 895552-47-3 895552-48-4 895552-49-5
 895552-50-8 895552-51-9 895552-52-0
 895552-53-1 895552-54-2 895552-55-3
 895552-56-4 895552-57-5 895552-58-6
 895552-59-7 895552-60-0 895552-61-1
 895552-62-2 895552-63-3 895552-64-4
 895552-65-5 895552-66-6 895552-67-7
 895552-68-8 895552-69-9 895552-70-2
 895552-71-3 895552-72-4 895552-73-5
 895552-74-6 895552-75-7 895552-76-8
 895552-77-9 895552-78-0 895552-79-1
 895552-80-4 895552-81-5 895552-82-6
 895552-83-7 895552-84-8 895552-85-9
 895552-86-0 895552-87-1 895552-88-2
 895552-89-3 895552-90-6 895552-91-7
 895552-92-8 895552-93-9 895552-94-0
 895552-95-1 895552-96-2 895552-97-3
 895552-98-4 895552-99-5 895553-00-1

895553-01-2 895553-02-3 895553-03-4
895553-04-5 895553-05-6 895553-06-7
895553-07-8 895553-08-9 895553-09-0
895553-10-3 895553-11-4 895553-12-5
895553-13-6 895553-14-7 895553-15-8
895553-16-9 895553-17-0 895553-18-1
895553-19-2 895553-20-5 895553-21-6
895553-22-7 895553-23-8 895553-24-9
895553-25-0 895553-26-1 895553-27-2
895553-28-3 895553-29-4 895553-30-7
895553-31-8 895553-32-9 895553-33-0
895553-34-1 895553-35-2 895553-36-3
895553-37-4 895553-38-5 895553-39-6
895553-40-9 895553-41-0 895553-42-1
895553-43-2 895553-44-3 895553-45-4
895553-46-5 895553-47-6 895553-48-7
895553-49-8 895553-50-1 895553-51-2
895553-52-3 895553-53-4 895553-54-5
895553-55-6 895553-56-7 895553-57-8
895553-58-9 895553-59-0 895553-60-3
895553-61-4 895553-62-5 895553-63-6
895553-64-7 895553-65-8 895553-66-9
895553-67-0 895553-68-1 895553-69-2
895553-70-5 895553-71-6 895553-72-7
895553-73-8 895553-74-9 895553-75-0
895553-76-1 895553-77-2 895553-78-3
895553-79-4 895553-80-7 895553-81-8
895553-82-9 895553-83-0 895553-84-1
895553-85-2 895553-86-3 895553-87-4
895553-88-5 895553-89-6 895553-90-9
895553-91-0 895553-93-2 895553-94-3
895553-95-4 895553-96-5 895553-97-6
895553-98-7 895553-99-8 895554-00-4
895554-01-5 895554-02-6 895554-03-7
895554-04-8 895554-05-9 895554-06-0
895554-07-1 895554-08-2 895554-09-3
895554-10-6 895554-11-7 895554-12-8
895554-13-9 895554-14-0 895554-15-1
895554-16-2 895556-02-2 895556-03-3
895556-04-4 895556-05-5 895556-06-6
895556-07-7 895556-08-8 895556-09-9
895556-10-2 895556-11-3 895556-12-4
895556-13-5 895556-14-6 895556-15-7
895556-16-8 895556-17-9 895556-18-0
895556-19-1 895556-20-4 895556-21-5
895556-22-6 895556-23-7 895556-24-8
895556-25-9 895556-26-0 895556-27-1
895556-28-2 895556-29-3 895556-30-6
895556-31-7 895556-32-8 895556-33-9
895556-34-0 895556-35-1 895556-36-2
895556-37-3 895556-38-4 895556-39-5
895556-40-8 895556-41-9 895556-42-0
895556-43-1 895556-44-2 895556-45-3
895556-46-4

RL: DEV (Device component use); USES (Uses)
(metal complexes with nucleophilic carbene ligands and devices and
processes using them)

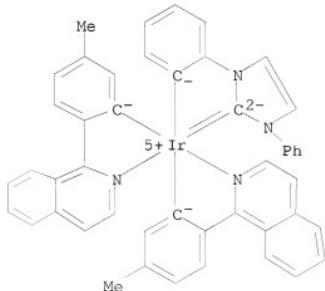
RN 895552-23-5 CAPLUS

CN Iridium, bis[4-(dimethylamino)-2-(2-quinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



RN 895552-24-6 CAPLUS

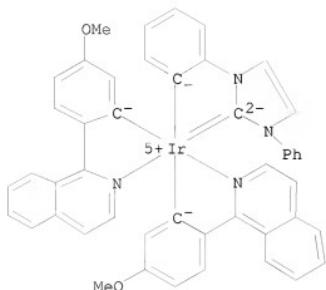
CN Iridium, bis[2-(1-isoquinolinyl- κ N)-5-methylphenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



RN 895552-25-7 CAPLUS

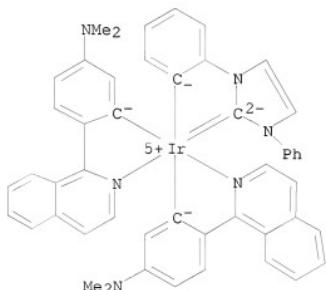
CN Iridium, bis[2-(1-isoquinolinyl- κ N)-5-methoxyphenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX

NAME)



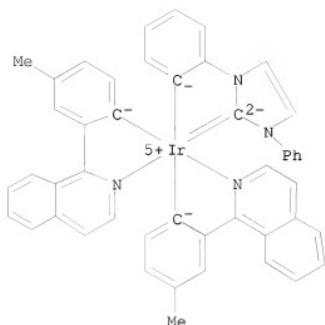
RN 895552-26-8 CAPLUS

CN Iridium, bis[5-(dimethylamino)-2-(1-isoquinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



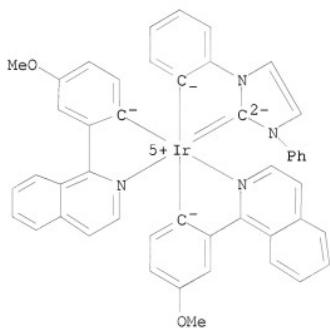
RN 895552-27-9 CAPLUS

CN Iridium, bis[2-(1-isoquinolinyl- κ N)-4-methylphenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



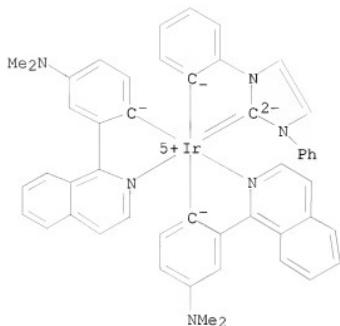
RN 895552-28-0 CAPLUS

CN Iridium, bis[2-(1-isoquinolinyl- κ N)-4-methoxyphenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



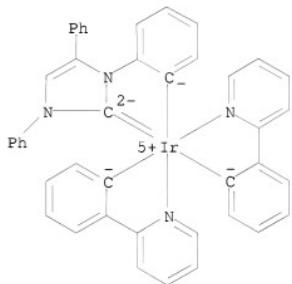
RN 895552-29-1 CAPLUS

CN Iridium, bis[4-(dimethylamino)-2-(1-isoquinolinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



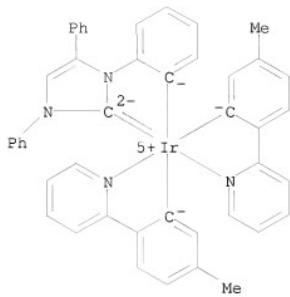
RN 895552-30-4 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)



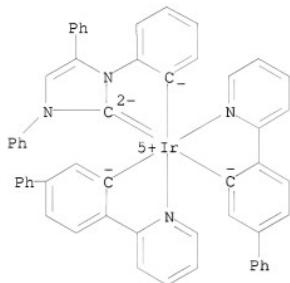
RN 895552-31-5 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-methyl-2-(2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)



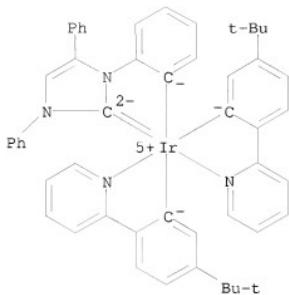
RN 895552-32-6 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[4-(2-pyridinyl- κ N)[1,1'-biphenyl]-3-yl- κ C]- (9CI) (CA INDEX NAME)



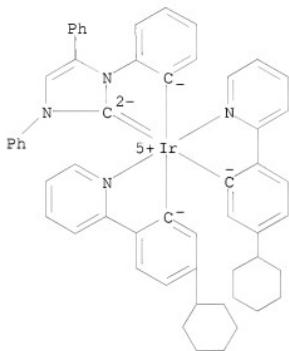
RN 895552-33-7 CAPLUS

CN Iridium, bis[5-(1,1-dimethylethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



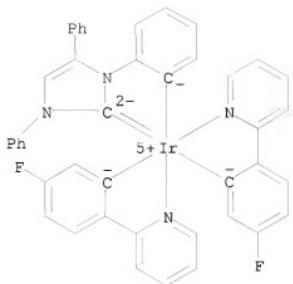
RN 895552-34-8 CAPLUS

CN Iridium, bis[5-cyclohexyl-2-(2-pyridinyl- κ N)phenyl- κ C][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



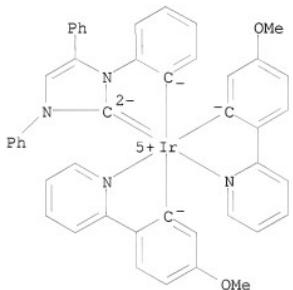
RN 895552-35-9 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-fluoro-2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



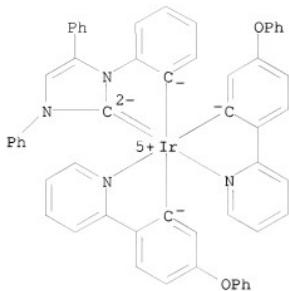
RN 895552-36-0 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-methoxy-2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI)
(CA INDEX NAME)



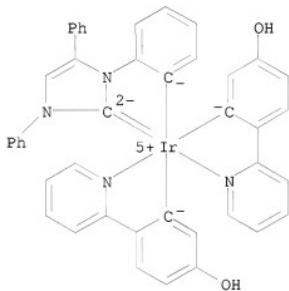
RN 895552-37-1 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-phenoxy-2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI)
(CA INDEX NAME)



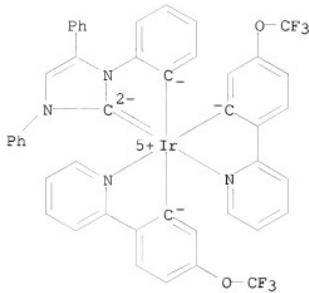
RN 895552-38-2 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-hydroxy-2-(2-pyridinyl-κN)phenyl-κC]- (9CI)
(CA INDEX NAME)



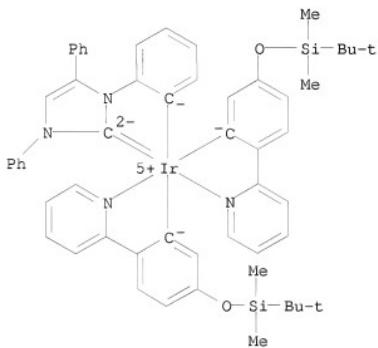
RN 895552-39-3 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(2-pyridinyl-κN)-5-(trifluoromethoxy)phenyl-κC]- (9CI)
(CA INDEX NAME)



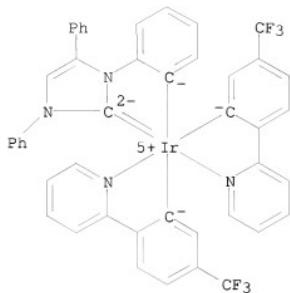
RN 895552-40-6 CAPLUS

CN Iridium, bis[5-[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-(2-pyridinyl-kN)phenyl-kC][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



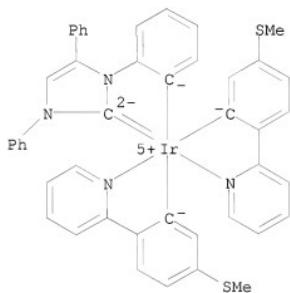
RN 895552-41-7 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(2-pyridinyl-kN)-5-(trifluoromethyl)phenyl-kC]- (9CI) (CA INDEX NAME)



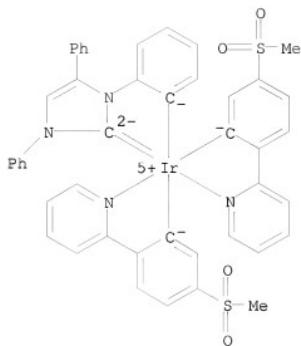
RN 895552-42-8 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-(methylthio)-2-(2-pyridinyl-κN)phenyl-κC]-
(9CI) (CA INDEX NAME)



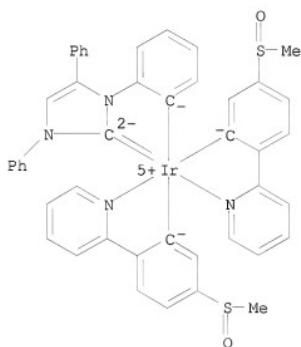
RN 895552-43-9 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-(methylsulfonyl)-2-(2-pyridinyl-κN)phenyl-κC]-
(9CI) (CA INDEX NAME)



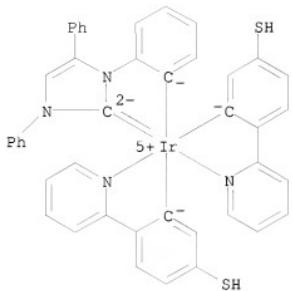
RN 895552-44-0 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-(methylsulfinyl)-2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



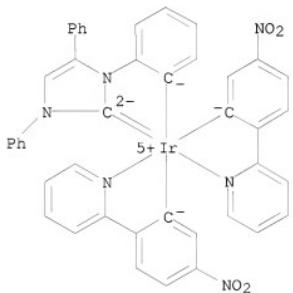
RN 895552-45-1 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-mercaptophe-2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



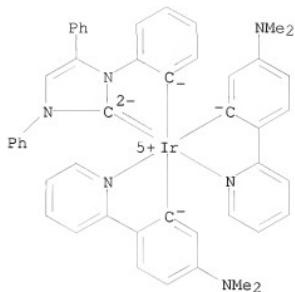
RN 895552-46-2 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-nitro-2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



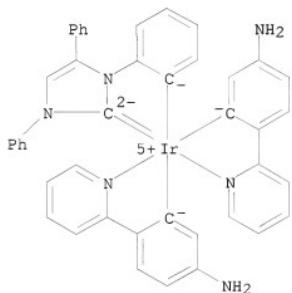
RN 895552-47-3 CAPLUS

CN Iridium, bis[5-(dimethylamino)-2-(2-pyridinyl- κ N)phenyl- κ C][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



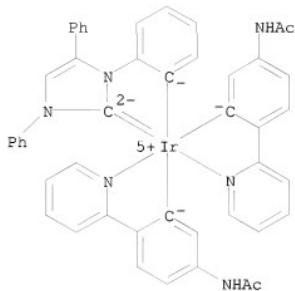
RN 895552-48-4 CAPLUS

CN Iridium, bis[5-amino-2-(2-pyridinyl-kN)phenyl-kC][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



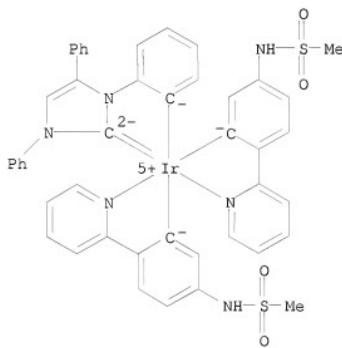
RN 895552-49-5 CAPLUS

CN Iridium, bis[5-(acetylamino)-2-(2-pyridinyl-kN)phenyl-kC][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



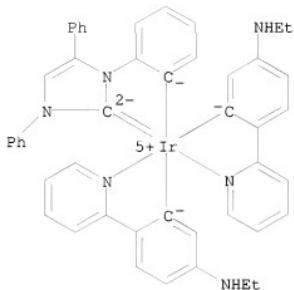
RN 895552-50-8 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-[{(methylsulfonyl)amino]-2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



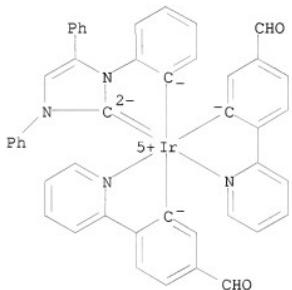
RN 895552-51-9 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-[(ethylamino)-2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



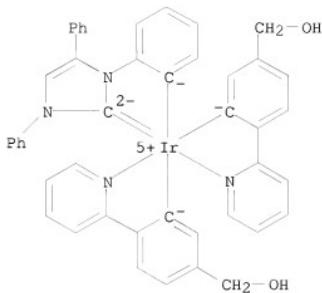
RN 895552-52-0 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-formyl-2-(2-pyridinyl-κN)phenyl-κC]- (9CI)
(CA INDEX NAME)



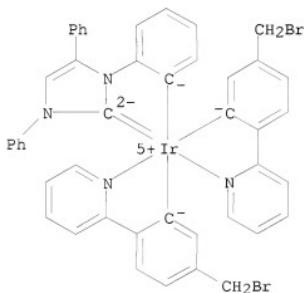
RN 895552-53-1 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-(hydroxymethyl)-2-(2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)



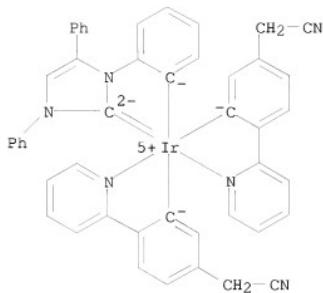
RN 895552-54-2 CAPLUS

CN Iridium, bis[5-(bromomethyl)-2-(2-pyridinyl-kN)phenyl-kC] [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



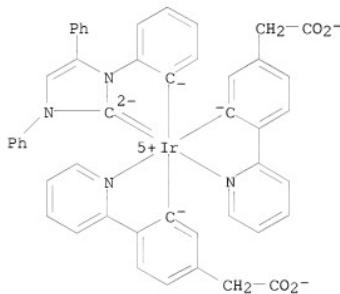
RN 895552-55-3 CAPLUS

CN Iridium, bis[5-(cyanomethyl)-2-(2-pyridinyl-kN)phenyl-kC] [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



RN 895552-56-4 CAPLUS

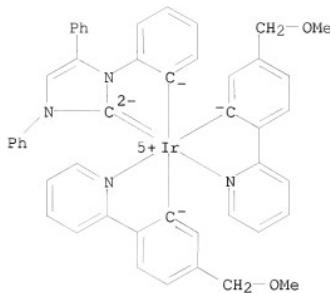
CN Iridate(2-), bis[5-(carboxylatomethyl)-2-(2-pyridinyl-κN)phenyl-κC][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-, dihydrogen (9CI) (CA INDEX NAME)



●2 H⁺

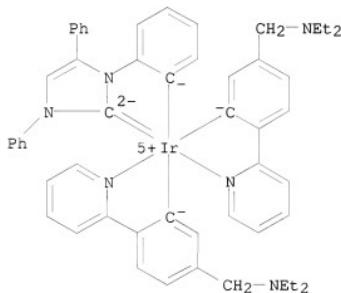
RN 895552-57-5 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-(methoxymethyl)-2-(2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)



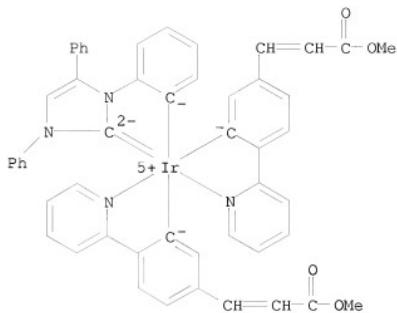
RN 895552-58-6 CAPLUS

CN Iridium, bis[5-[(diethylamino)methyl]-2-(2-pyridinyl- κ N)phenyl- κ C]-[3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene]-1,2-phenylene]- (9CI) (CA INDEX NAME)



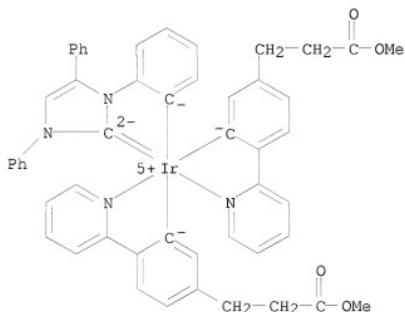
RN 895552-59-7 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-(3-methoxy-3-oxo-1-propenyl)-2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



RN 895552-60-0 CAPLUS

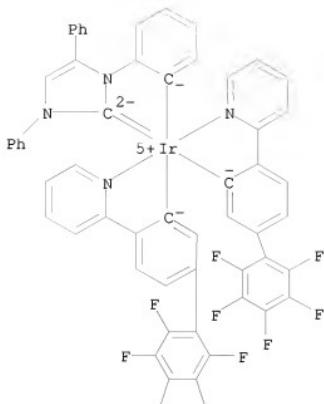
CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[5-(3-methoxy-3-oxopropyl)-2-(2-pyridinyl-kN)phenyl-kC]- (9CI) (CA INDEX NAME)



RN 895552-61-1 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2',3',4',5',6'-pentafluoro-4-(2-pyridinyl-kN)[1,1'-biphenyl]-3-yl-kC]- (9CI) (CA INDEX NAME)

PAGE 1-A

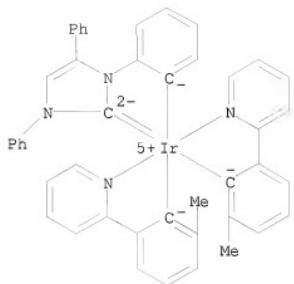


PAGE 2-A



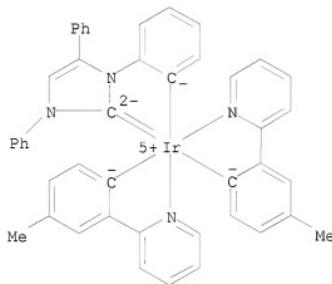
RN 895552-62-2 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-methyl-6-(2-pyridinyl- κ N)phenyl- κ C]- (9CI)
(CA INDEX NAME)



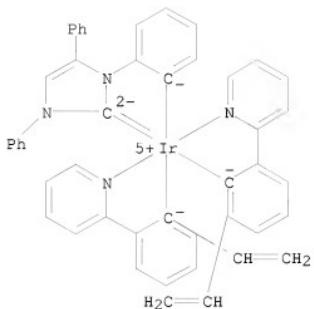
RN 895552-63-3 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[4-methyl-2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI)
(CA INDEX NAME)



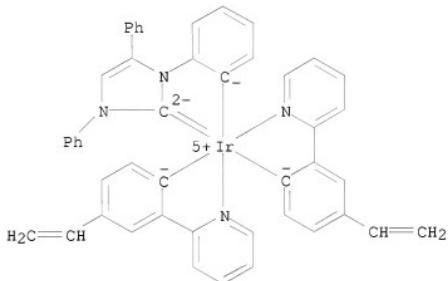
RN 895552-64-4 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-ethenyl-6-(2-pyridinyl- κ N)phenyl- κ C]- (9CI)
(CA INDEX NAME)



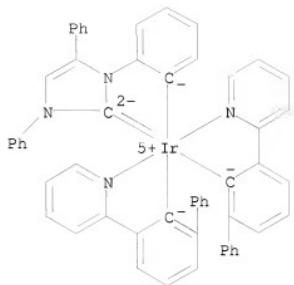
RN 895552-65-5 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[4-ethenyl-2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI)
(CA INDEX NAME)

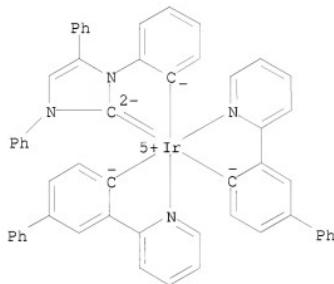


RN 895552-66-6 CAPLUS

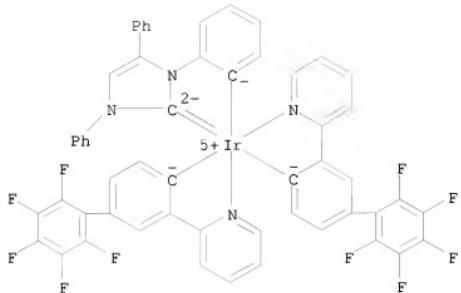
CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[3-(2-pyridinyl- κ N)[1,1'-biphenyl]-2-yl- κ C]- (9CI) (CA INDEX NAME)



RN 895552-67-7 CAPLUS
CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[3-(2-pyridinyl-κN)[1,1'-biphenyl]-4-yl-κC]- (9CI) (CA INDEX NAME)



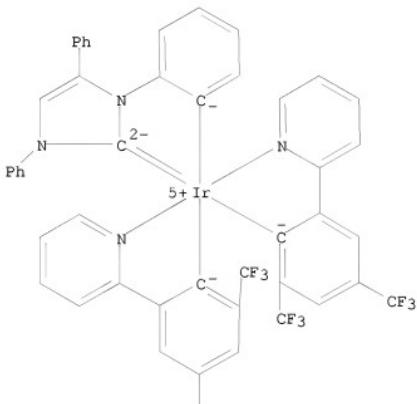
RN 895552-68-8 CAPLUS
CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2',3',4',5',6'-pentafluoro-3-(2-pyridinyl-κN)[1,1'-biphenyl]-4-yl-κC]- (9CI) (CA INDEX NAME)



RN 89552-69-9 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(2-pyridinyl- κ N)-4,6-bis(trifluoromethyl)phenyl- κ C]- (9CI) (CA INDEX NAME)

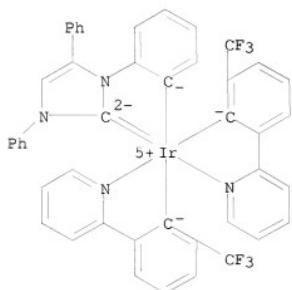
PAGE 1-A



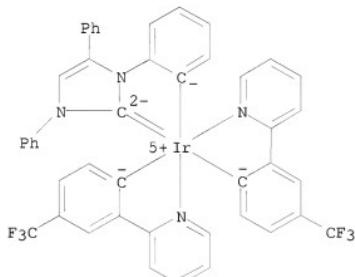
PAGE 2-A



RN 895552-70-2 CAPLUS
 CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(2-pyridinyl- κ N)-6-(trifluoromethyl)phenyl- κ C]- (9CI) (CA INDEX NAME)

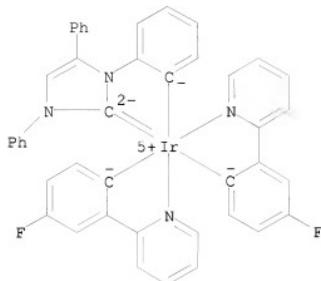


RN 895552-71-3 CAPLUS
 CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(2-pyridinyl- κ N)-4-(trifluoromethyl)phenyl- κ C]- (9CI) (CA INDEX NAME)



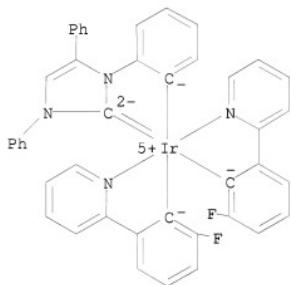
RN 895552-72-4 CAPLUS
 CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[4-fluoro-2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI)

(CA INDEX NAME)



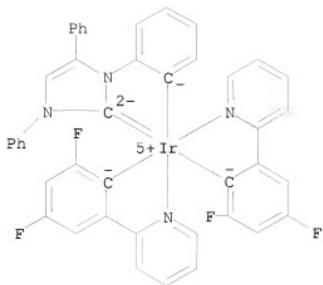
RN 895552-73-5 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-fluoro-6-(2-pyridinyl- κ N)phenyl- κ C]- (9CI)
(CA INDEX NAME)



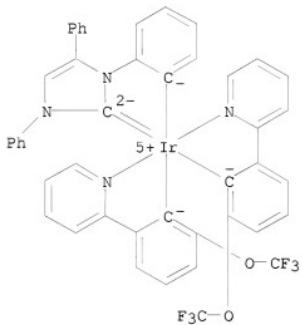
RN 895552-74-6 CAPLUS

CN Iridium, bis[2,4-difluoro-6-(2-pyridinyl- κ N)phenyl- κ C][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



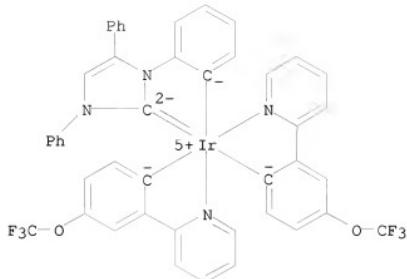
RN 895552-75-7 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(2-pyridinyl-κN)-6-(trifluoromethoxy)phenyl-κC]- (9CI) (CA INDEX NAME)



RN 895552-76-8 CAPLUS

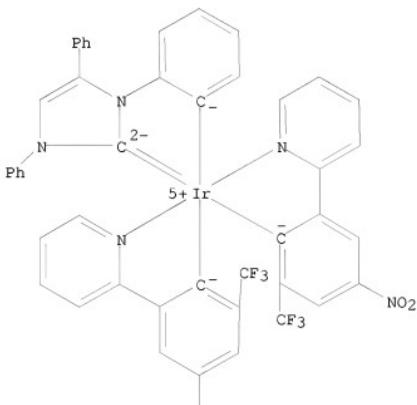
CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(2-pyridinyl-κN)-4-(trifluoromethoxy)phenyl-κC]- (9CI) (CA INDEX NAME)



RN 895552-77-9 CAPLUS

CN Iridium [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[4-nitro-2-(2-pyridinyl- κ N)-6-(trifluoromethyl)phenyl- κ C]- (9CI) (CA INDEX NAME)

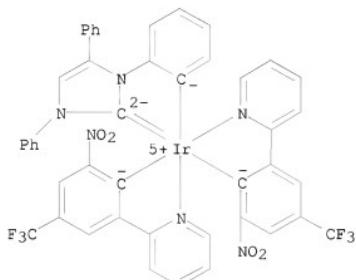
PAGE 1-A



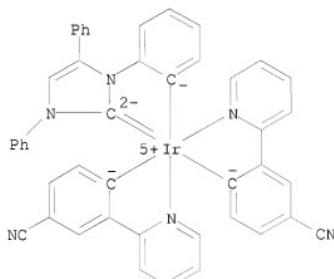
PAGE 2-A



RN 895552-78-0 CAPLUS
 CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-nitro-6-(2-pyridinyl-κN)-4-(trifluoromethyl)phenyl-κC]- (9CI) (CA INDEX NAME)

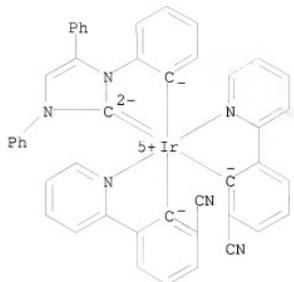


RN 895552-79-1 CAPLUS
 CN Iridium, bis[4-cyano-2-(2-pyridinyl-κN)phenyl-κC][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



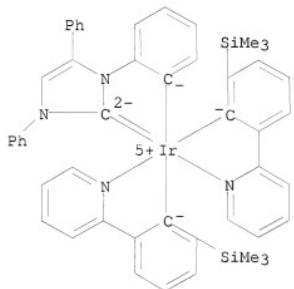
RN 895552-80-4 CAPLUS
 CN Iridium, bis[2-cyano-6-(2-pyridinyl-κN)phenyl-κC][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX

NAME)



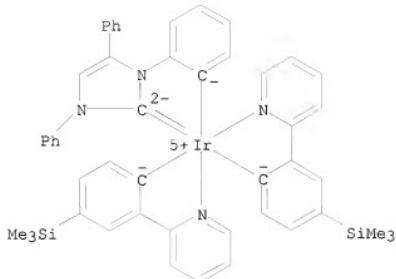
RN 895552-81-5 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(2-pyridinyl- κ N)-6-(trimethylsilyl)phenyl- κ C]- (9CI) (CA INDEX NAME)

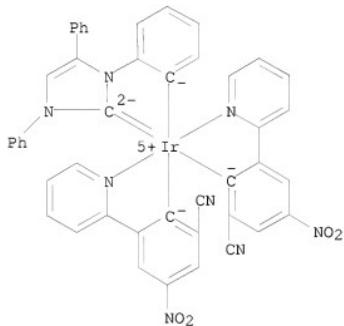


RN 895552-82-6 CAPLUS

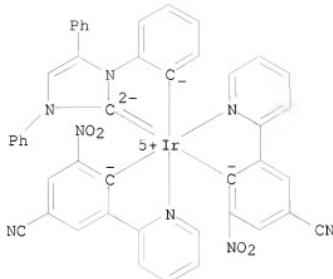
CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(2-pyridinyl- κ N)-4-(trimethylsilyl)phenyl- κ C]- (9CI) (CA INDEX NAME)



RN 895552-83-7 CAPLUS
CN Iridium, bis[2-cyano-4-nitro-6-(2-pyridinyl- κ N)phenyl- κ C](3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)

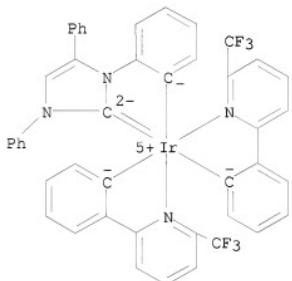


RN 895552-84-8 CAPLUS
CN Iridium, bis[4-cyano-2-nitro-6-(2-pyridinyl- κ N)phenyl- κ C](3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



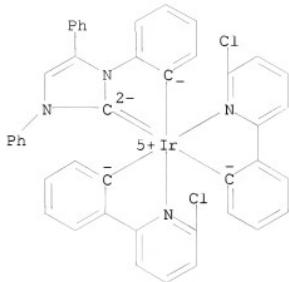
RN 895552-85-9 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-[6-(trifluoromethyl)-2-pyridinyl-κN]phenyl-κC]- (9CI) (CA INDEX NAME)



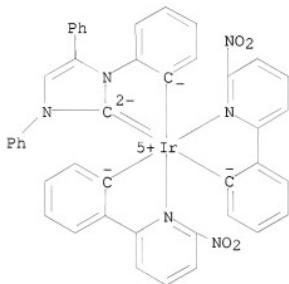
RN 895552-86-0 CAPLUS

CN Iridium, bis[2-(6-chloro-2-pyridinyl-κN)phenyl-κC][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



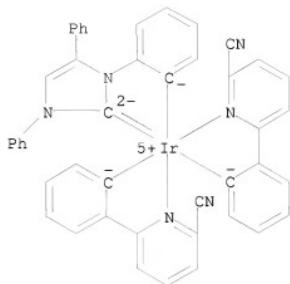
RN 895552-87-1 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(6-nitro-2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)



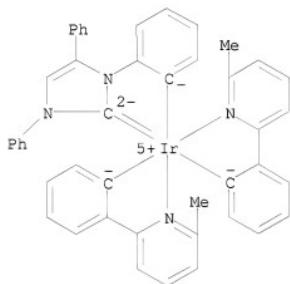
RN 895552-88-2 CAPLUS

CN Iridium, bis[2-(6-cyano-2-pyridinyl-κN)phenyl-κC][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



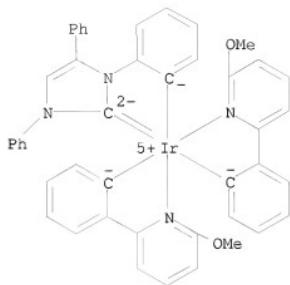
RN 895552-89-3 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(6-methyl-2-pyridinyl-κN)phenyl-κC]- (9CI)
(CA INDEX NAME)



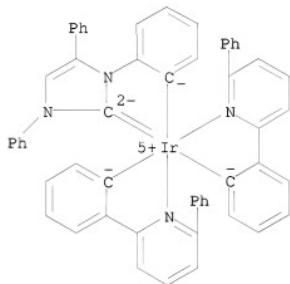
RN 895552-90-6 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(6-methoxy-2-pyridinyl-κN)phenyl-κC]- (9CI)
(CA INDEX NAME)



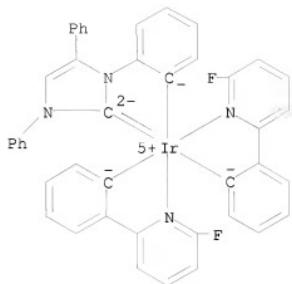
RN 895552-91-7 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(6-phenyl-2-pyridinyl-κN)phenyl-κC]⁻ (9CI)
(CA INDEX NAME)



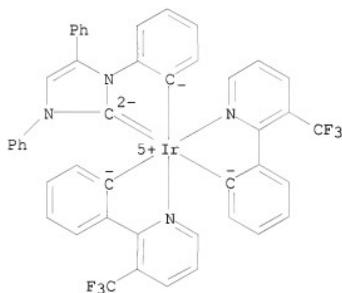
RN 895552-92-8 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(6-fluoro-2-pyridinyl-κN)phenyl-κC]⁻ (9CI)
(CA INDEX NAME)



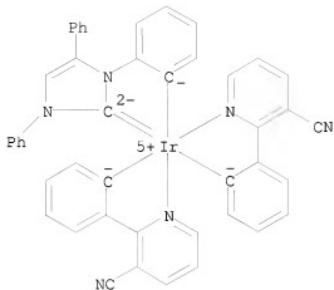
RN 895552-93-9 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(3-(trifluoromethyl)-2-pyridinyl-κN]phenyl-κC]- (9CI) (CA INDEX NAME)



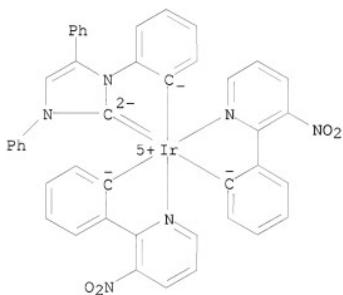
RN 895552-94-0 CAPLUS

CN Iridium, bis[2-(3-cyano-2-pyridinyl-κN)phenyl-κC][(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]- (9CI) (CA INDEX NAME)



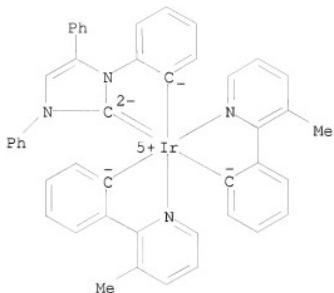
RN 895552-95-1 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(3-nitro-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



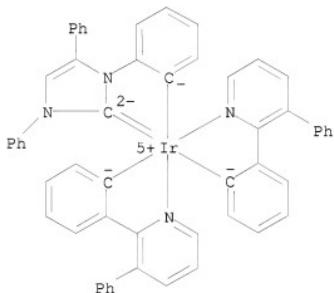
RN 895552-96-2 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(3-methyl-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



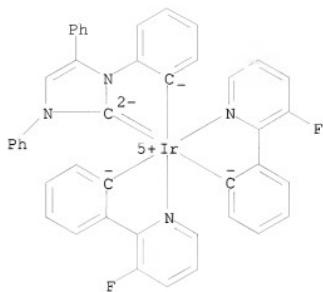
RN 895552-97-3 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(3-phenyl-2-pyridinyl-κN)phenyl-κC]- (9CI)
(CA INDEX NAME)



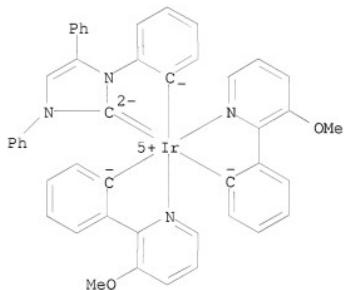
RN 895552-98-4 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(3-fluoro-2-pyridinyl-κN)phenyl-κC]- (9CI)
(CA INDEX NAME)



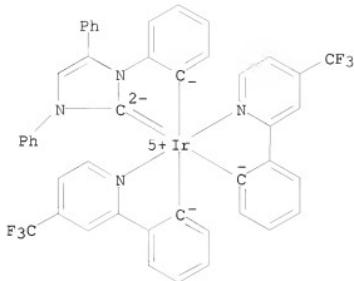
RN 895552-99-5 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(3-methoxy-2-pyridinyl- κ N)phenyl- κ C]- (9CI)
(CA INDEX NAME)



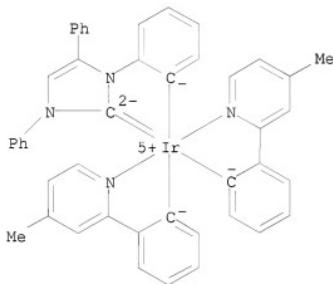
RN 895553-00-1 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-[4-(trifluoromethyl)-2-pyridinyl- κ N]phenyl- κ C]- (9CI)
(CA INDEX NAME)



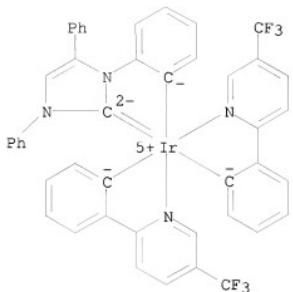
RN 895553-01-2 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(4-methyl-2-pyridinyl-κN)phenyl-κC]- (9CI)
(CA INDEX NAME)



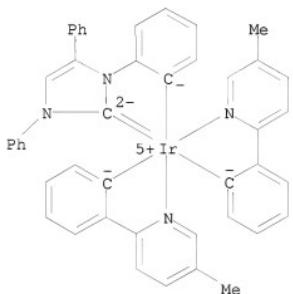
RN 895553-02-3 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-[5-(trifluoromethyl)-2-pyridinyl-κN]phenyl-κC]- (9CI) (CA INDEX NAME)



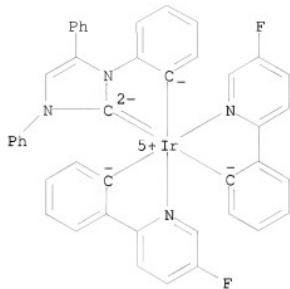
RN 895553-03-4 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(5-methyl-2-pyridinyl-κN)phenyl-κC]- (9CI)
(CA INDEX NAME)



RN 895553-04-5 CAPLUS

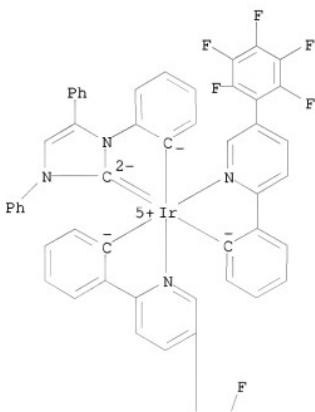
CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(5-fluoro-2-pyridinyl-κN)phenyl-κC]- (9CI)
(CA INDEX NAME)

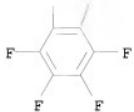


RN 895553-05-6 CAPLUS

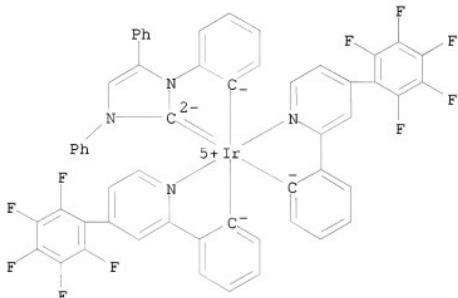
CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-[5-(pentafluorophenyl)-2-pyridinyl- κ N]phenyl- κ C]- (9CI) (CA INDEX NAME)

PAGE 1-A



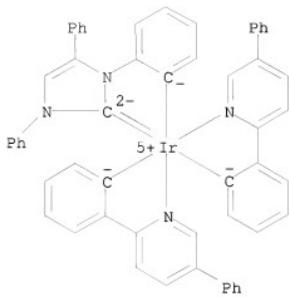


RN 895553-06-7 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(4-(pentafluorophenyl)-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)

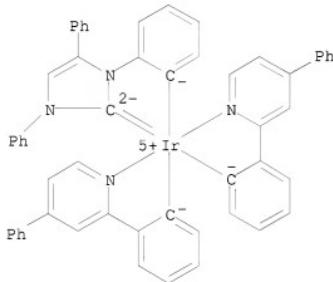
RN 895553-07-8 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(5-phenyl-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



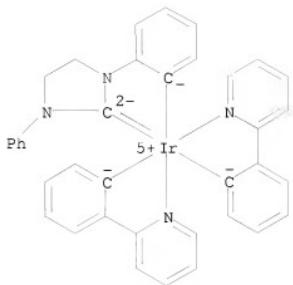
RN 895553-08-9 CAPLUS

CN Iridium, [(3,5-diphenyl-1H-imidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]bis[2-(4-phenyl-2-pyridinyl-κN)phenyl-κC]- (9CI)
(CA INDEX NAME)



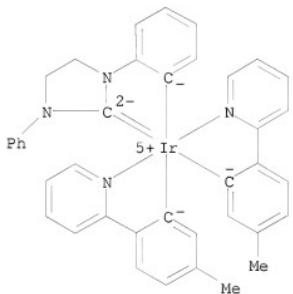
RN 895553-09-0 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)



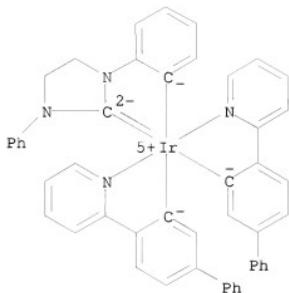
RN 895553-10-3 CAPLUS

CN Iridium, bis[5-methyl-2-(2-pyridinyl-κN)phenyl-κC] (1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)) - (9CI) (CA INDEX NAME)



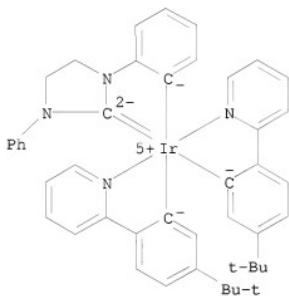
RN 895553-11-4 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[4-(2-pyridinyl-κN)[1,1'-biphenyl]-3-yl-κC] - (9CI) (CA INDEX NAME)



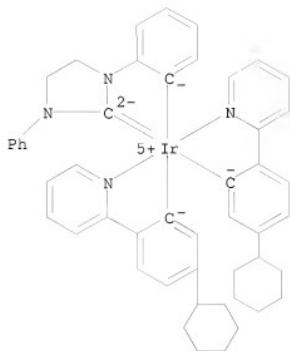
RN 895553-12-5 CAPLUS

CN Iridium, bis[5-(1,1-dimethylethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



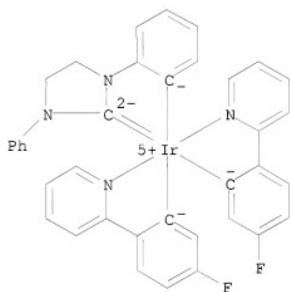
RN 895553-13-6 CAPLUS

CN Iridium, bis[5-cyclohexyl-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



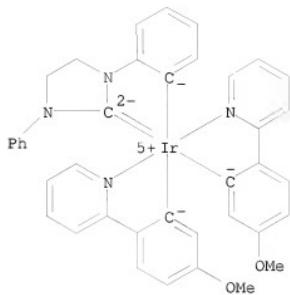
RN 895553-14-7 CAPLUS

CN Iridium, bis[5-fluoro-2-(2-pyridinyl-κN)phenyl-κC] [1,2-phenylene] (3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



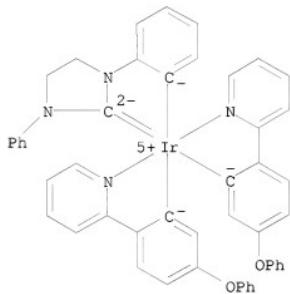
RN 895553-15-8 CAPLUS

CN Iridium, bis[5-methoxy-2-(2-pyridinyl-κN)phenyl-κC] [1,2-phenylene] (3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



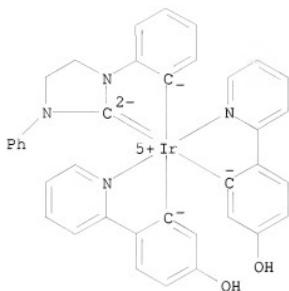
RN 895553-16-9 CAPLUS

CN Iridium, bis[5-phenoxy-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



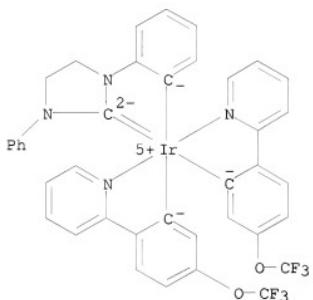
RN 895553-17-0 CAPLUS

CN Iridium, bis[5-hydroxy-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



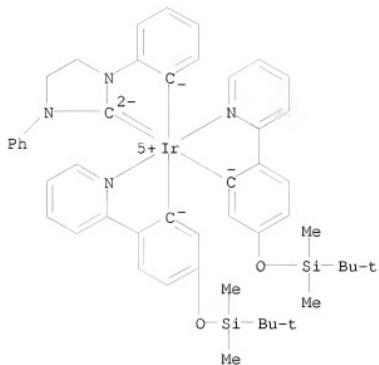
RN 895553-18-1 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(2-pyridinyl- κ N)-5-(trifluoromethoxy)phenyl- κ C]- (9CI) (CA INDEX NAME)

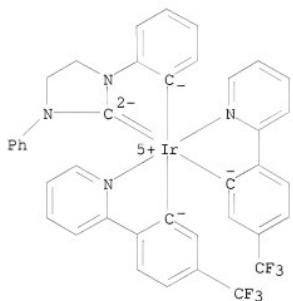


RN 895553-19-2 CAPLUS

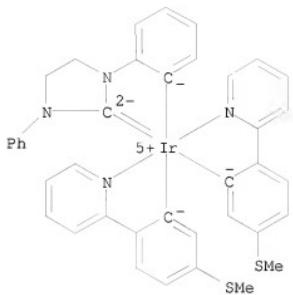
CN Iridium, bis[5-[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895553-20-5 CAPLUS
CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(2-pyridinyl- κ N)-5-(trifluoromethyl)phenyl- κ C]- (9CI) (CA INDEX NAME)

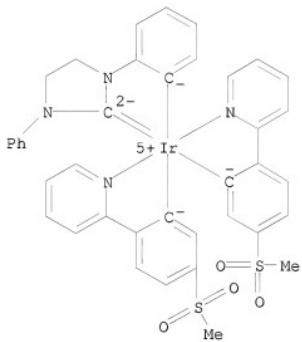


RN 895553-21-6 CAPLUS
CN Iridium, bis[5-(methylthio)-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



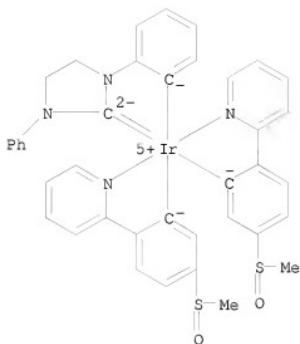
RN 895553-22-7 CAPLUS

CN Iridium, bis[5-(methylsulfonyl)-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



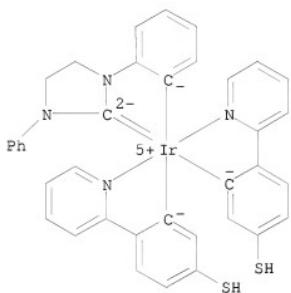
RN 895553-23-8 CAPLUS

CN Iridium, bis[5-(methylsulfinyl)-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



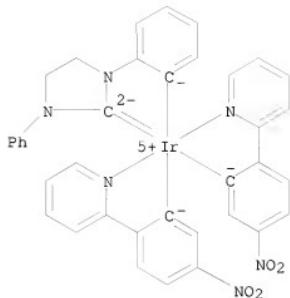
RN 895553-24-9 CAPLUS

CN Iridium, bis[5-mercaptop-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



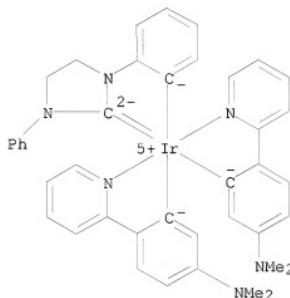
RN 895553-25-0 CAPLUS

CN Iridium, bis[5-nitro-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



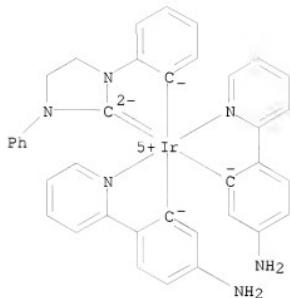
RN 895553-26-1 CAPLUS

CN Iridium, bis[5-(dimethylamino)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



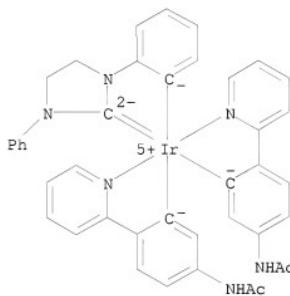
RN 895553-27-2 CAPLUS

CN Iridium, bis[5-amino-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



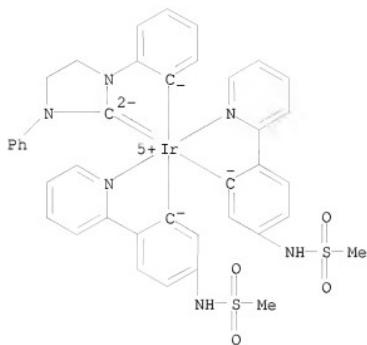
RN 895553-28-3 CAPLUS

CN Iridium, bis[5-(acetylamino)-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



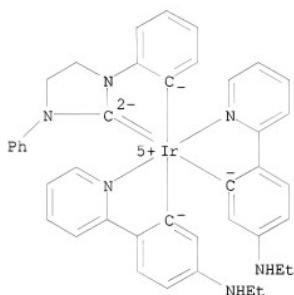
RN 895553-29-4 CAPLUS

CN Iridium, bis[5-[(methylsulfonyl)amino]-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



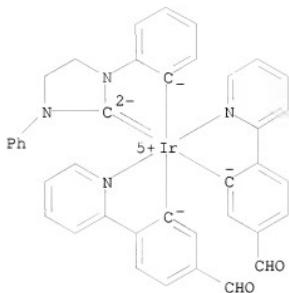
RN 895553-30-7 CAPLUS

CN Iridium, bis[5-(ethylamino)-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



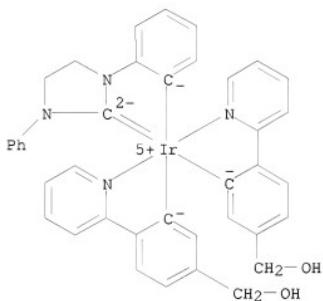
RN 895553-31-8 CAPLUS

CN Iridium, bis[5-formyl-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



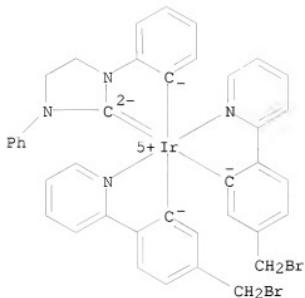
RN 895553-32-9 CAPLUS

CN Iridium, bis[5-(hydroxymethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



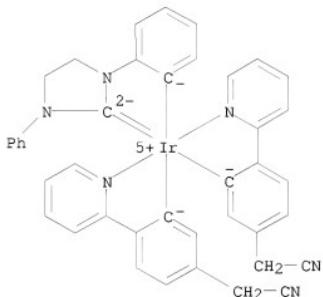
RN 895553-33-0 CAPLUS

CN Iridium, bis[5-(bromomethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



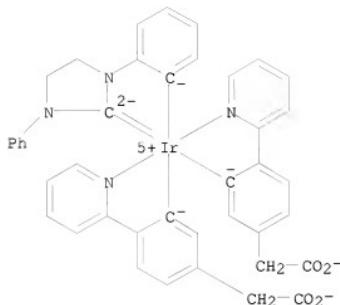
RN 895553-34-1 CAPLUS

CN Iridium, bis[5-(cyanomethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



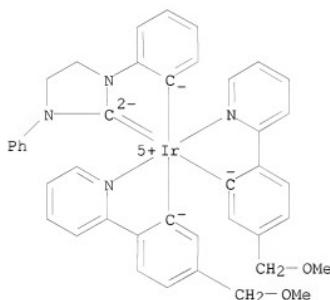
RN 895553-35-2 CAPLUS

CN Iridate(2-), bis[5-(carboxylatomethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]-, dihydrogen (9CI) (CA INDEX NAME)



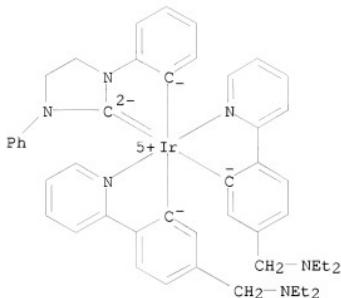
RN 895553-36-3 CAPLUS

CN Iridium, bis[5-(methoxymethyl)-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



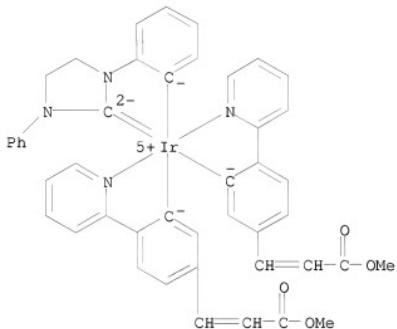
RN 895553-37-4 CAPLUS

CN Iridium, bis[5-[(diethylamino)methyl]-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



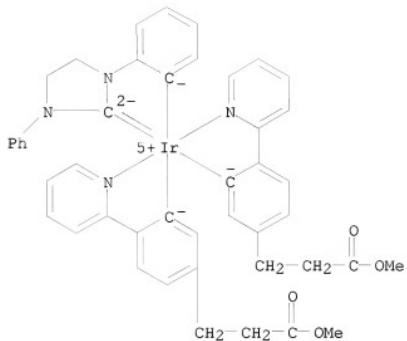
RN 895553-38-5 CAPLUS

CN Iridium, bis[5-(3-methoxy-3-oxo-1-propenyl)-2-(2-pyridinyl- κN)phenyl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



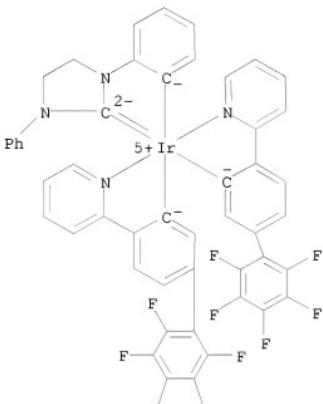
RN 895553-39-6 CAPLUS

CN Iridium, bis[5-(3-methoxy-3-oxopropyl)-2-(2-pyridinyl- κN)phenyl- κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895553-40-9 CAPLUS
CN Iridium, bis[2',3',4',5',6'-pentafluoro-4-(2-pyridinyl-κN){1,1'-biphenyl}-3-yl-κC[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

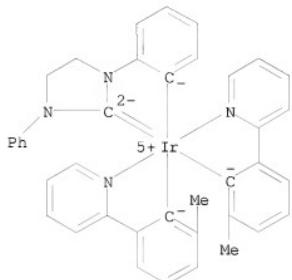
PAGE 1-A



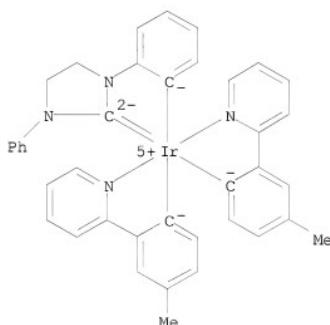
PAGE 2-A



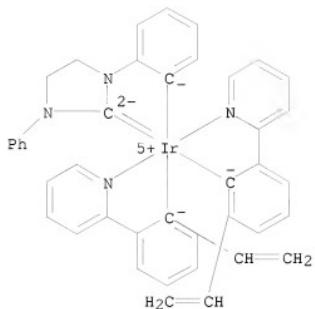
RN 895553-41-0 CAPLUS
 CN Iridium, bis[2-methyl-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895553-42-1 CAPLUS
 CN Iridium, bis[4-methyl-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

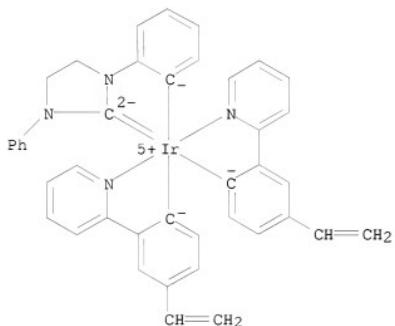


RN 895553-43-2 CAPLUS
 CN Iridium, bis[2-ethenyl-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



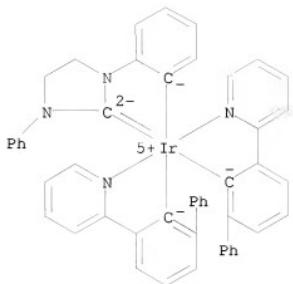
RN 895553-44-3 CAPLUS

CN Iridium, bis[4-ethenyl-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



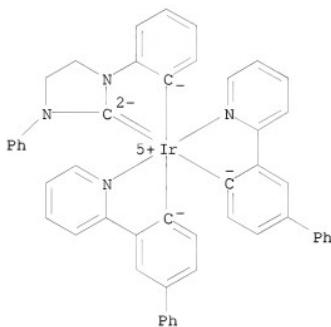
RN 895553-45-4 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[3-(2-pyridinyl-κN)[1,1'-biphenyl]-2-yl-κC]- (9CI) (CA INDEX NAME)



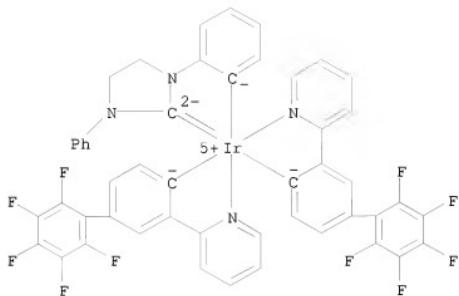
RN 895553-46-5 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis(3-(2-pyridinyl-κN)[1,1'-biphenyl]-4-yl-κC]- (9CI) (CA INDEX NAME)



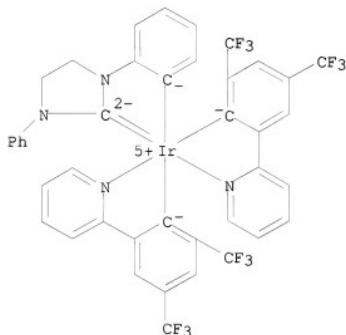
RN 895553-47-6 CAPLUS

CN Iridium, bis[2',3',4',5',6'-pentafluoro-3-(2-pyridinyl-κN)[1,1'-biphenyl]-4-yl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



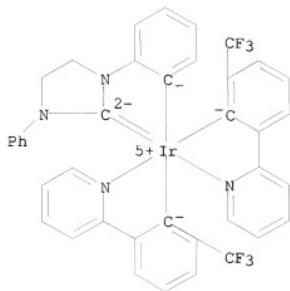
RN 895553-48-7 CAPLUS

CN Iridium, [1, 2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(2-pyridinyl-κN)-4,6-bis(trifluoromethyl)phenyl-κC]- (9CI) (CA INDEX NAME)



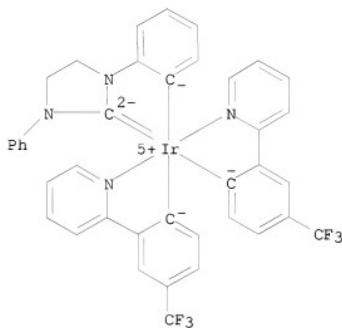
RN 895553-49-8 CAPLUS

CN Iridium, [1, 2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(2-pyridinyl-κN)-6-(trifluoromethyl)phenyl-κC]- (9CI) (CA INDEX NAME)



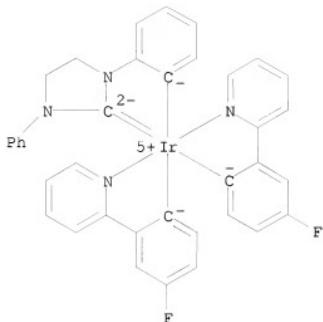
RN 895553-50-1 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(2-pyridinyl-κN)-4-(trifluoromethyl)phenyl-κC]- (9CI) (CA INDEX NAME)



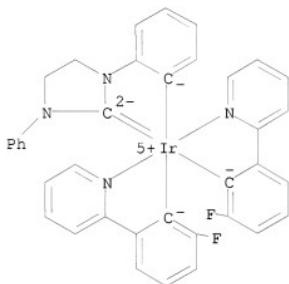
RN 895553-51-2 CAPLUS

CN Iridium, bis[4-fluoro-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



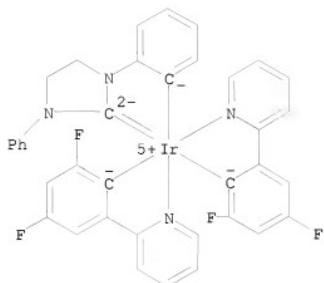
RN 895553-52-3 CAPLUS

CN Iridium, bis[2-fluoro-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



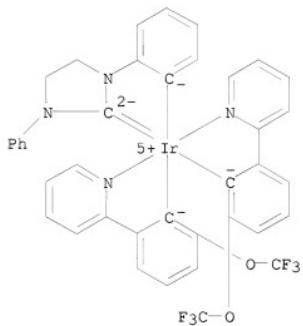
RN 895553-53-4 CAPLUS

CN Iridium, bis[2,4-difluoro-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



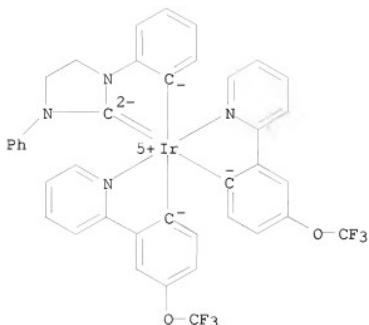
RN 895553-54-5 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(2-pyridinyl-κN)-6-(trifluoromethoxy)phenyl-κC]- (9CI) (CA INDEX NAME)



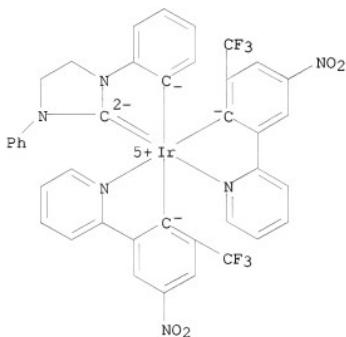
RN 895553-55-6 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(2-pyridinyl-κN)-4-(trifluoromethoxy)phenyl-κC]- (9CI) (CA INDEX NAME)



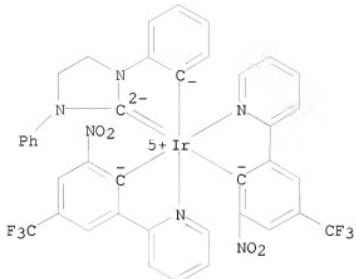
RN 895553-56-7 CAPLUS

CN Iridium, bis[4-nitro-2-(2-pyridinyl- κ N)-6-(trifluoromethyl)phenyl- κ C] [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



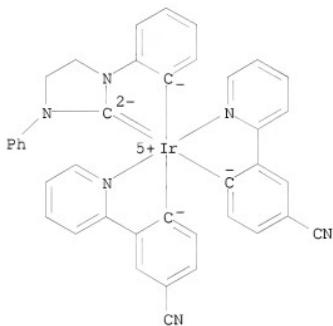
RN 895553-57-8 CAPLUS

CN Iridium, bis[2-nitro-6-(2-pyridinyl- κ N)-4-(trifluoromethyl)phenyl- κ C] [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



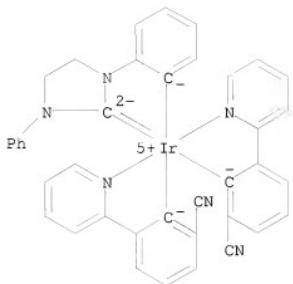
RN 895553-58-9 CAPLUS

CN Iridium, bis[4-cyano-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



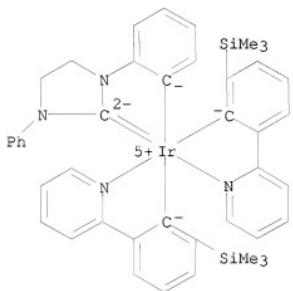
RN 895553-59-0 CAPLUS

CN Iridium, bis[2-cyano-6-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



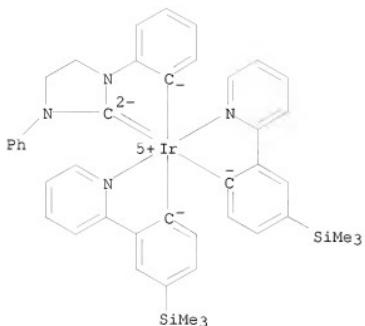
RN 895553-60-3 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(2-pyridinyl-κN)-6-(trimethylsilyl)phenyl-κC]- (9CI) (CA INDEX NAME)



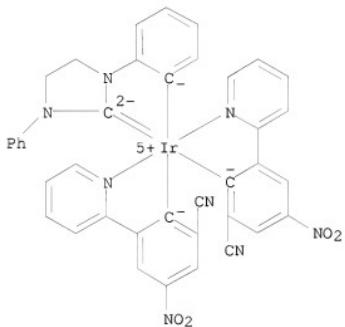
RN 895553-61-4 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(2-pyridinyl-κN)-4-(trimethylsilyl)phenyl-κC]- (9CI) (CA INDEX NAME)



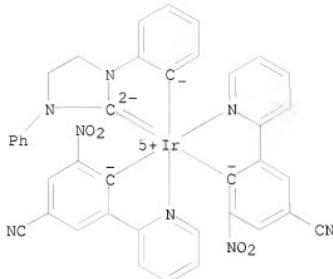
RN 895553-62-5 CAPLUS

CN Iridium, bis[2-cyano-4-nitro-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



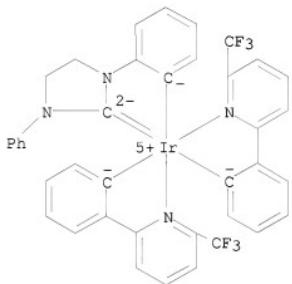
RN 895553-63-6 CAPLUS

CN Iridium, bis[4-cyano-2-nitro-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



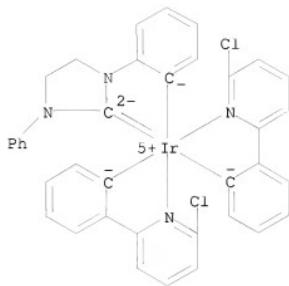
RN 895553-64-7 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis(2-[6-(trifluoromethyl)-(2-pyridinyl-kN)phenyl-kC]- (9CI) (CA INDEX NAME)



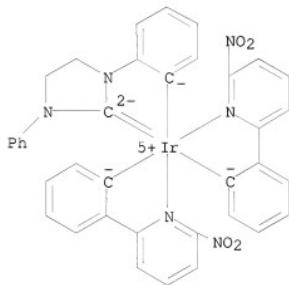
RN 895553-65-8 CAPLUS

CN Iridium, bis[2-(6-chloro-2-pyridinyl-kN)phenyl-kC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



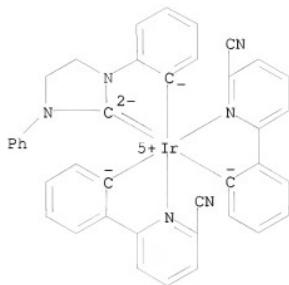
RN 895553-66-9 CAPLUS

CN Iridium, bis[2-(6-nitro-2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



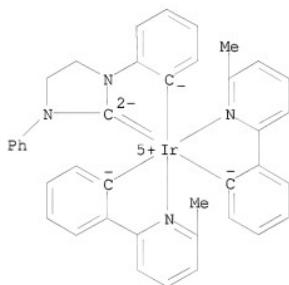
RN 895553-67-0 CAPLUS

CN Iridium, bis[2-(6-cyano-2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



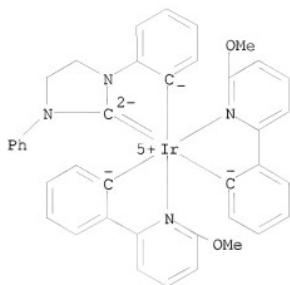
RN 895553-68-1 CAPLUS

CN Iridium, bis[2-(6-methyl-2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



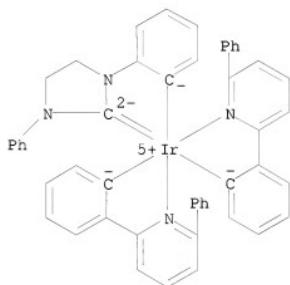
RN 895553-69-2 CAPLUS

CN Iridium, bis[2-(6-methoxy-2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



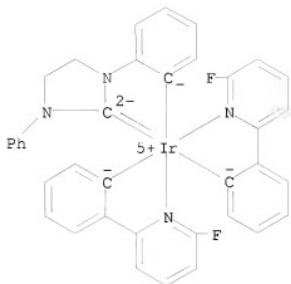
RN 895553-70-5 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(6-phenyl-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



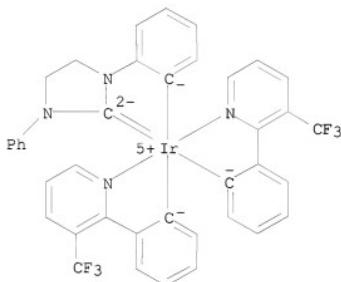
RN 895553-71-6 CAPLUS

CN Iridium, bis[2-(6-fluoro-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



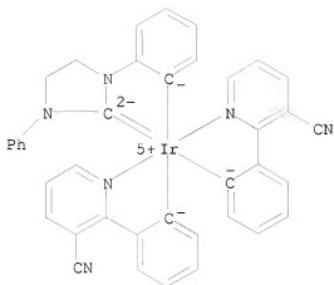
RN 895553-72-7 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis(2-[3-(trifluoromethyl)-2-pyridinyl- κ N]phenyl- κ C)- (9CI) (CA INDEX NAME)



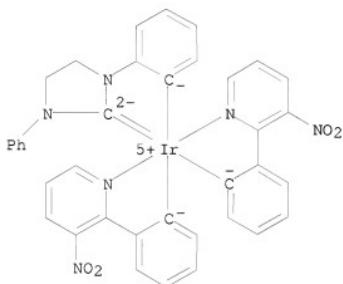
RN 895553-73-8 CAPLUS

CN Iridium, bis[2-(3-cyano-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



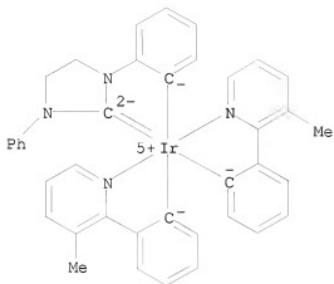
RN 895553-74-9 CAPLUS

CN Iridium, bis[2-(3-nitro-2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



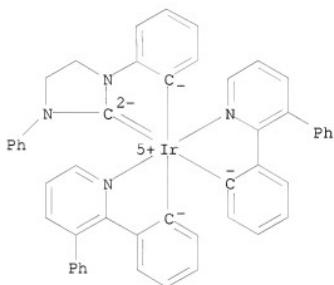
RN 895553-75-0 CAPLUS

CN Iridium, bis[2-(3-methyl-2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



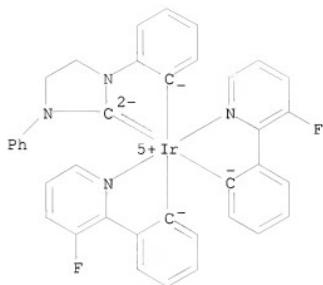
RN 895553-76-1 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis(2-(3-phenyl-2-pyridinyl- κ N)phenyl- κ C)- (9CI) (CA INDEX NAME)



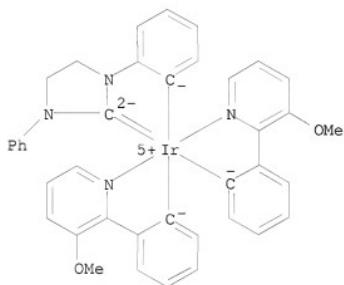
RN 895553-77-2 CAPLUS

CN Iridium, bis[2-(3-fluoro-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



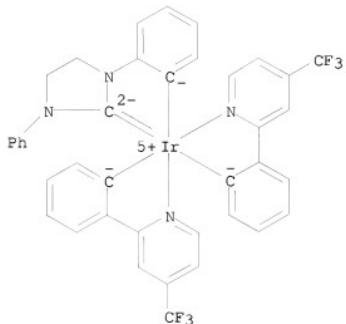
RN 895553-78-3 CAPLUS

CN Iridium, bis[2-(3-methoxy-2-pyridinyl- κ N)phenyl- κ C]{[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]}- (9CI) (CA INDEX NAME)



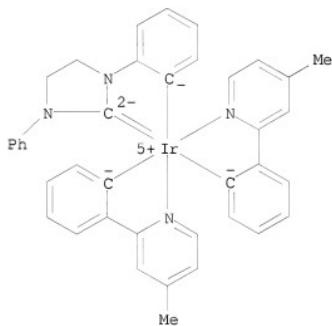
RN 895553-79-4 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-[4-(trifluoromethyl)-2-pyridinyl- κ N]phenyl- κ C]- (9CI) (CA INDEX NAME)



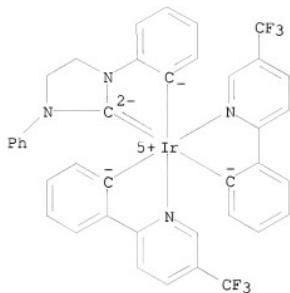
RN 895553-80-7 CAPLUS

CN Iridium, bis[2-(4-methyl-2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}⁻ (9CI) (CA INDEX NAME)



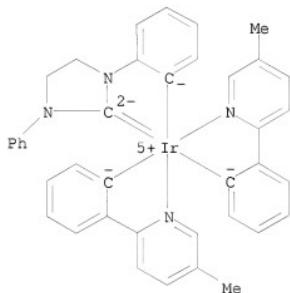
RN 895553-81-8 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-[5-(trifluoromethyl)-2-pyridinyl-κN]phenyl-κC]⁻ (9CI) (CA INDEX NAME)



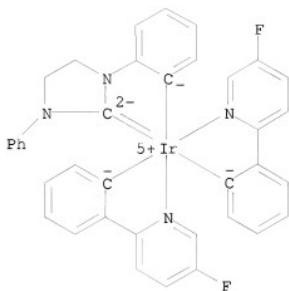
RN 895553-82-9 CAPLUS

CN Iridium, bis[2-(5-methyl-2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



RN 895553-83-0 CAPLUS

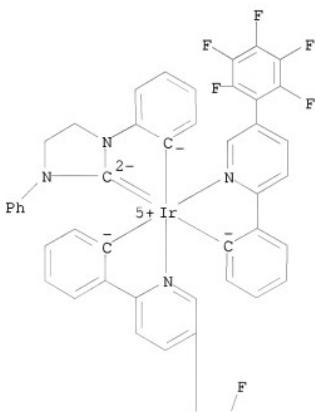
CN Iridium, bis[2-(5-fluoro-2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)

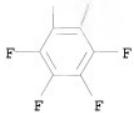


RN 895553-84-1 CAPLUS

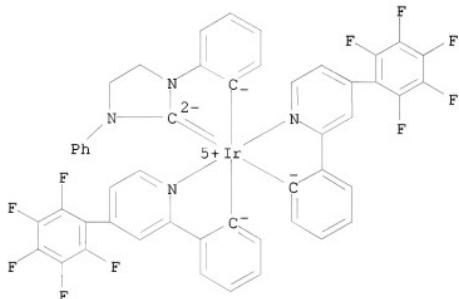
CN Iridium, bis[2-[5-(pentafluorophenyl)-2-pyridinyl- κ N]phenyl- κ C](1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene))-(9CI) (CA INDEX NAME)

PAGE 1-A

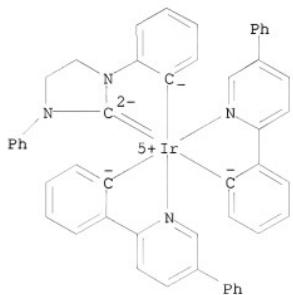




RN 895553-85-2 CAPLUS

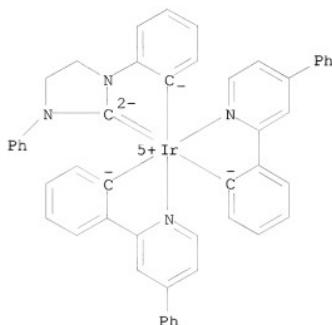
CN Iridium, bis[2-[4-(pentafluorophenyl)-2-pyridinyl- κ N]phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

RN 895553-86-3 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(5-phenyl-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)

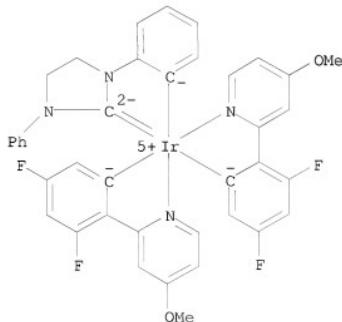
RN 895553-87-4 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(4-phenyl-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



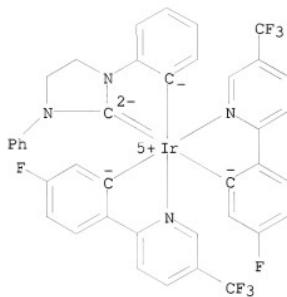
RN 895553-88-5 CAPLUS

CN Iridium, bis[3,5-difluoro-2-(4-methoxy-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

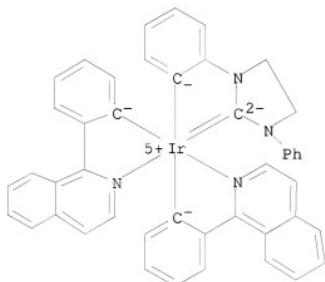


RN 895553-89-6 CAPLUS

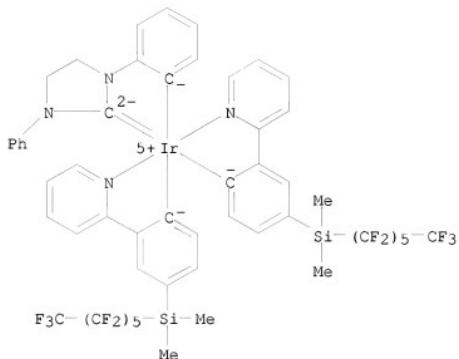
CN Iridium, bis[5-fluoro-2-[5-(trifluoromethyl)-2-pyridinyl- κ N]phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895553-90-9 CAPLUS
CN Iridium, bis[2-(1-isoquinolinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



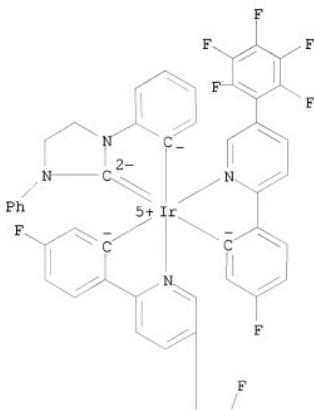
RN 895553-91-0 CAPLUS
CN Iridium, bis[4-[dimethyl(tridecafluorohexyl)silyl]-2-(2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



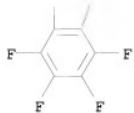
RN 895553-93-2 CAPLUS

CN Iridium, bis[5-fluoro-2-[5-(pentafluorophenyl)-2-pyridinyl- κ N]phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A



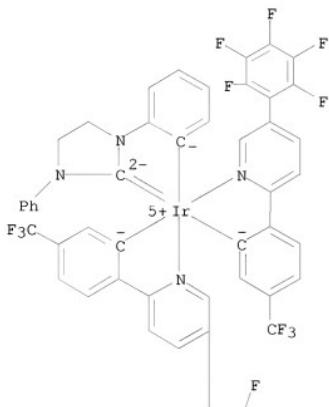
PAGE 2-A



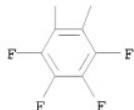
RN 895553-94-3 CAPLUS

CN Iridium, bis[2-[5-(pentafluorophenyl)-2-pyridinyl- κ N]-5-(trifluoromethyl)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

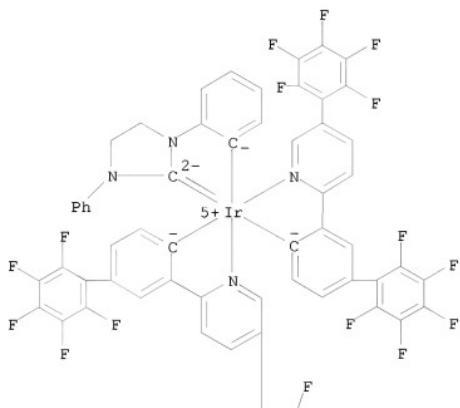


RN 895553-95-4 CAPLUS

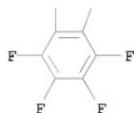
CN Iridium, bis[2',3',4',5',6'-pentafluoro-3-[5-(pentafluorophenyl)-2-pyridinyl- κ N][1,1'-biphenyl]-4-yl- κ C][1,2-phenylene(3-phenyl-1-

imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A



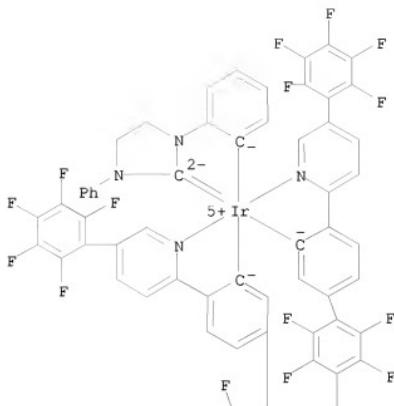
PAGE 2-A



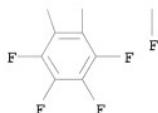
RN 895553-96-5 CAPLUS

CN Iridium, bis[2',3',4',5',6'-pentafluoro-4-[5-(pentafluorophenyl)-2-pyridinyl- κ N][1,1'-biphenyl]-3-yl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A



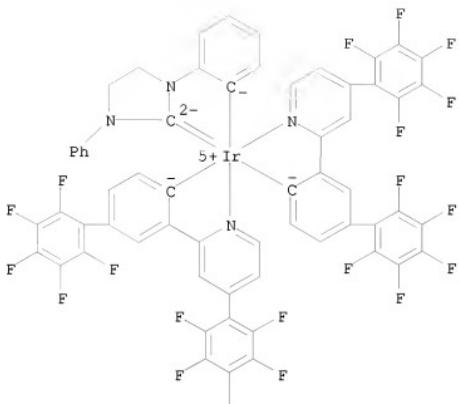
PAGE 2-A



BN 895553-97-6 CAPTUS

CN Iridium, bis[2',3',4',5',6'-pentafluoro-3-[4-(pentafluorophenyl)-2-pyridinyl- κ N][1,1'-biphenyl]-4-yl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A



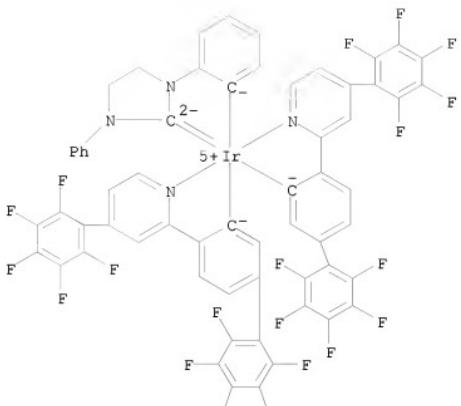
PAGE 2-A

|
F

RN 895553-98-7 CAPLUS

CN Iridium, bis[2',3',4',5',6'-pentafluoro-4-[4-(pentafluorophenyl)-2-pyridinyl- κ N][1,1'-biphenyl]-3-yl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A

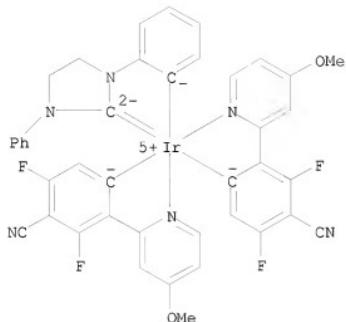


PAGE 2-A



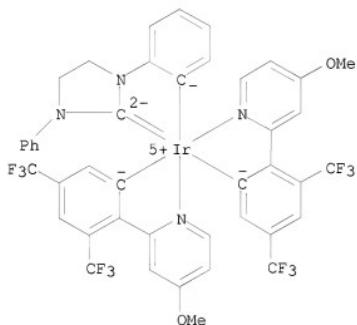
RN 895553-99-8 CAPLUS

CN Iridium, bis[4-cyano-3,5-difluoro-2-(4-methoxy-2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



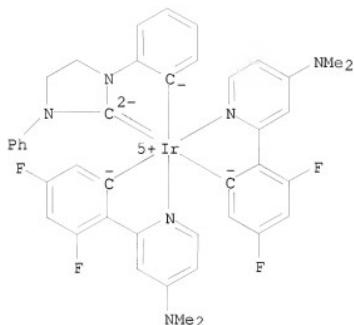
RN 895554-00-4 CAPLUS

CN Iridium, bis[2-(4-methoxy-2-pyridinyl- κ N)-3,5-bis(trifluoromethyl)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



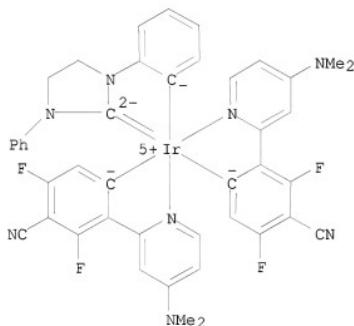
RN 895554-01-5 CAPLUS

CN Iridium, bis[2-[4-(dimethylamino)-2-pyridinyl- κ N]-3,5-difluorophenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



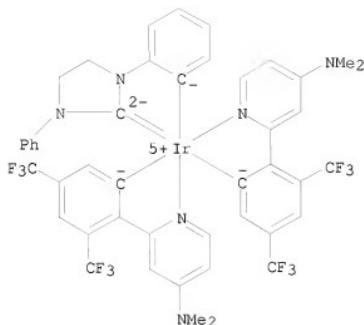
RN 895554-02-6 CAPLUS

CN Iridium, bis[4-cyano-2-[4-(dimethylamino)-2-pyridinyl- κ N]-3,5-difluorophenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



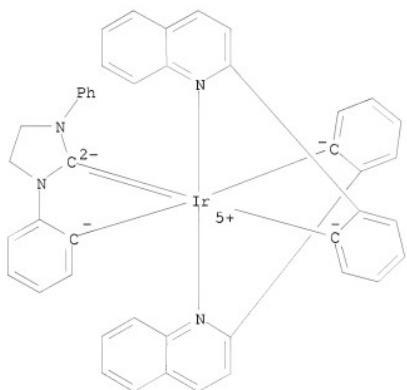
RN 895554-03-7 CAPLUS

CN Iridium, bis[2-[4-(dimethylamino)-2-pyridinyl- κ N]-3,5-bis(trifluoromethyl)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



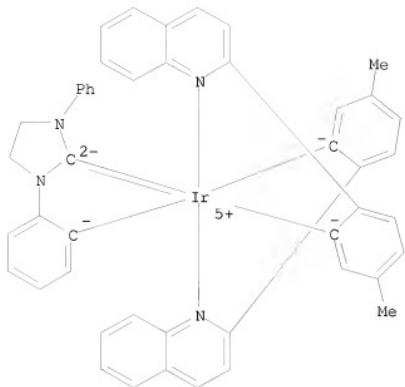
RN 895554-04-8 CAPLUS

CN Iridium, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis[2-(2-quinolinylnitrogen)phenyl]- (9CI) (CA INDEX NAME)



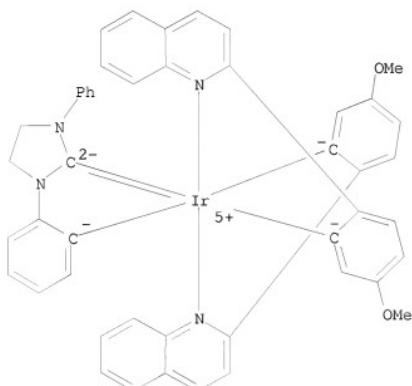
RN 895554-05-9 CAPLUS

CN Iridium, bis[5-methyl-2-(2-quinolinylnitrogen)phenyl]-[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895554-06-0 CAPLUS

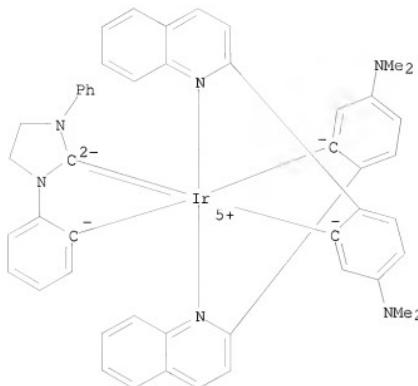
CN Iridium, bis[5-methoxy-2-(2-quinolinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895554-07-1 CAPLUS

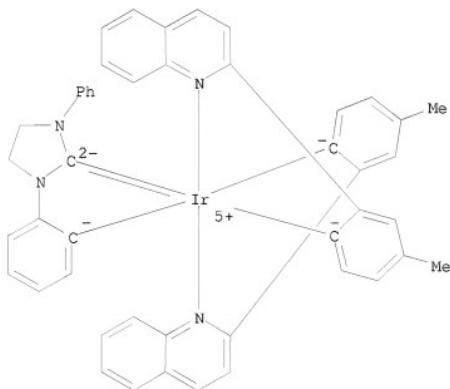
CN Iridium, bis[5-(dimethylamino)-2-(2-quinolinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)

INDEX NAME)



RN 895554-08-2 CAPLUS

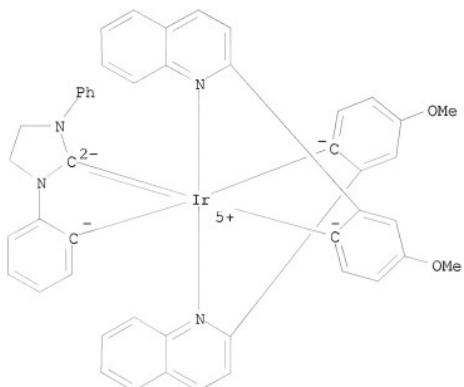
CN Iridium, bis[4-methyl-2-(2-quinolinyl-kN)phenyl-kC][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895554-09-3 CAPLUS

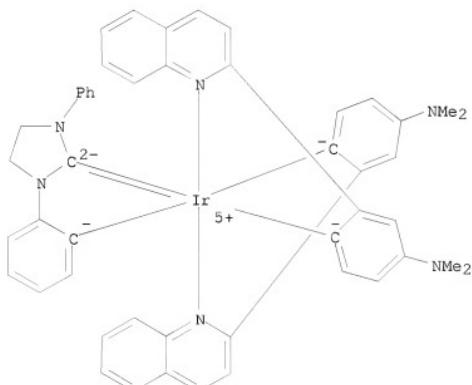
10568344b.trn

CN Iridium, bis[4-methoxy-2-(2-quinolinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



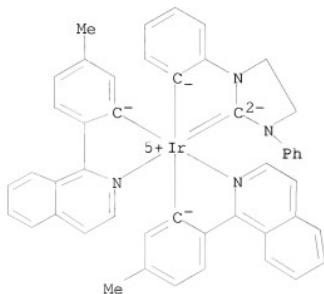
RN 89554-10-6 CAPLUS

CN Iridium, bis[4-(dimethylamino)-2-(2-quinolinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



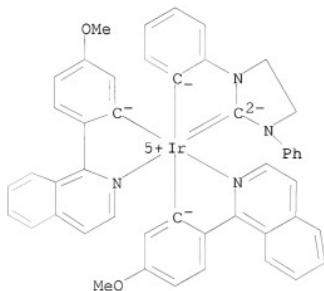
RN 895554-11-7 CAPLUS

CN Iridium, bis[2-(1-isoquinolinyl- κ N)-5-methylphenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



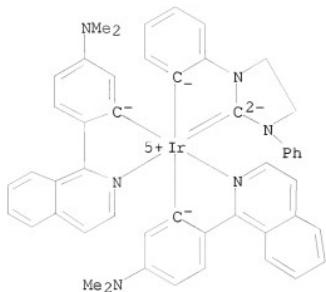
RN 895554-12-8 CAPLUS

CN Iridium, bis[2-(1-isoquinolinyl- κ N)-5-methoxyphenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



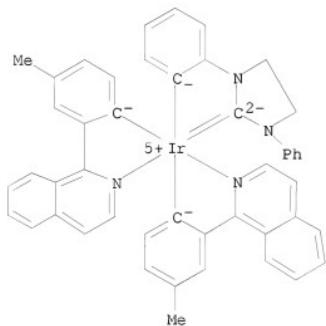
RN 895554-13-9 CAPLUS

CN Iridium, bis[5-(dimethylamino)-2-(1-isoquinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



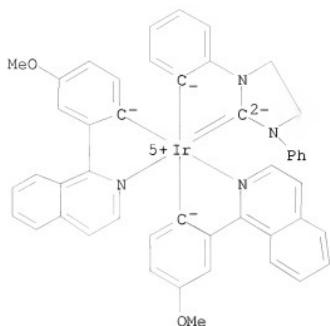
RN 895554-14-0 CAPLUS

CN Iridium, bis[2-(1-isoquinolinyl-κN)-4-methylphenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



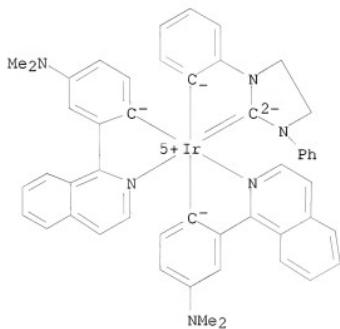
RN 895554-15-1 CAPLUS

CN Iridium, bis[2-(1-isoquinolinyl-κN)-4-methoxyphenyl-κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



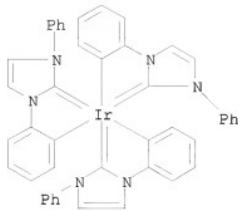
RN 895554-16-2 CAPLUS

CN Iridium, bis[4-(dimethylamino)-2-(1-isoquinolinyl- κ N)phenyl- κ C] [1,2-phenylene(3-phenyl-1H-imidazol-1-ylidene)]- (9CI) (CA INDEX NAME)

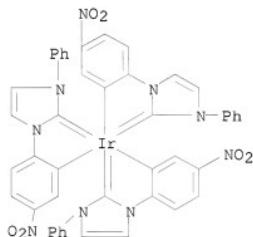


RN 895556-02-2 CAPLUS

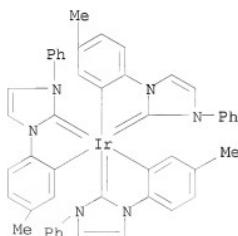
CN Iridium, tris[1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



RN 895556-03-3 CAPLUS
CN Iridium, tris[(5-nitro-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

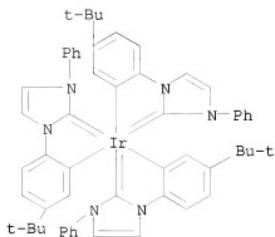


RN 895556-04-4 CAPLUS
CN Iridium, tris[(5-methyl-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



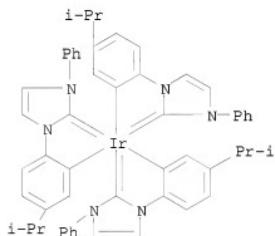
RN 895556-05-5 CAPLUS
CN Iridium, tris[5-(1,1-dimethylethyl)-1,2-phenylene](3-phenyl-1H-imidazol-1-

y1-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



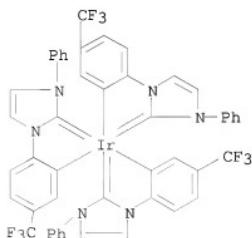
RN 895556-06-6 CAPLUS

CN Iridium, tris[5-(1-methylethyl)-1,2-phenylene](3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)]- (9CI) (CA INDEX NAME)



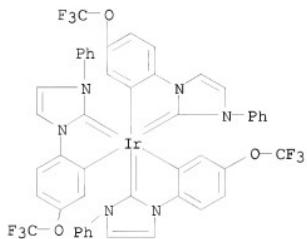
RN 895556-07-7 CAPLUS

CN Iridium, tris[(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)(4-(trifluoromethyl)-1,2-phenylene)]- (9CI) (CA INDEX NAME)



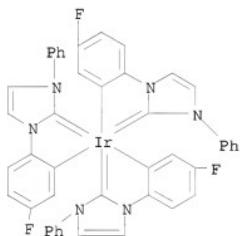
RN 895556-08-8 CAPLUS

CN Iridium, tris[(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene){4-(trifluoromethoxy)-1,2-phenylene}]- (9CI) (CA INDEX NAME)



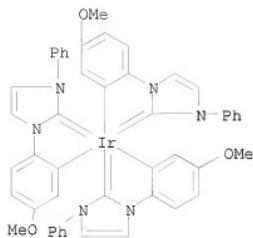
RN 895556-09-9 CAPLUS

CN Iridium, tris[(5-fluoro-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

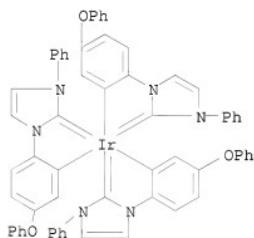


RN 895556-10-2 CAPLUS

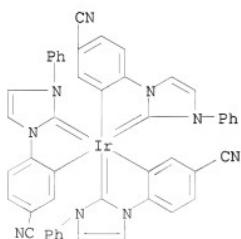
CN Iridium, tris[(5-methoxy-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



RN 895556-11-3 CAPLUS
CN Iridium, tris[(5-phenoxy-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



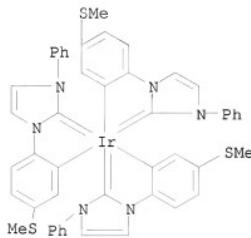
RN 895556-12-4 CAPLUS
CN Iridium, tris[(5-cyano-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



RN 895556-13-5 CAPLUS

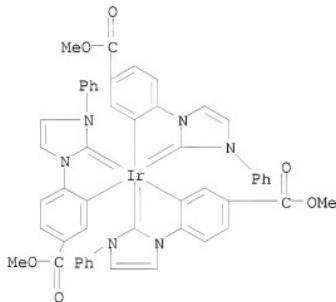
10568344b.trn

CN Iridium, tris[5-(methylthio)-1,2-phenylene](3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



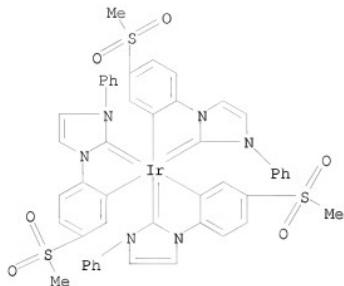
RN 895556-14-6 CAPLUS

CN Iridium, tris[5-(methoxycarbonyl)-1,2-phenylene](3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

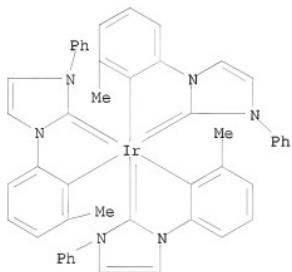


RN 895556-15-7 CAPLUS

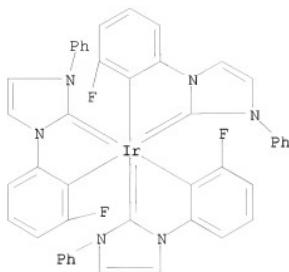
CN Iridium, tris[5-(methylsulfonyl)-1,2-phenylene](3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



RN 895556-16-8 CAPLUS
CN Iridium, tris[(6-methyl-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

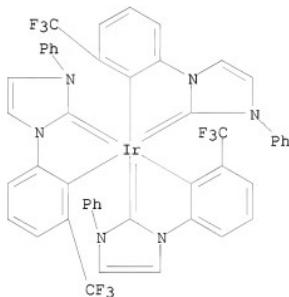


RN 895556-17-9 CAPLUS
CN Iridium, tris[(6-fluoro-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



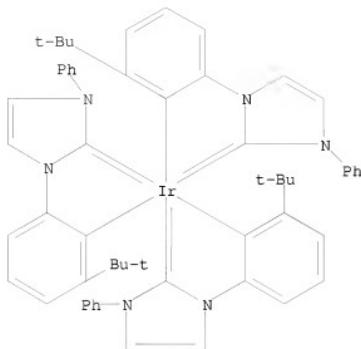
RN 895556-18-0 CAPLUS

CN Iridium, tris[(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene){3-(trifluoromethyl)-1,2-phenylene}]- (9CI) (CA INDEX NAME)



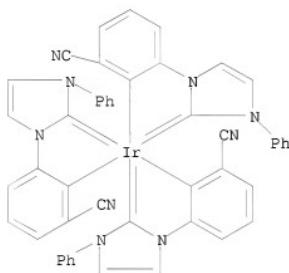
RN 895556-19-1 CAPLUS

CN Iridium, tris[(6-(1,1-dimethylethyl)-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



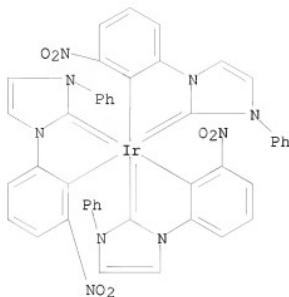
RN 895556-20-4 CAPLUS

CN Iridium, tris[(6-cyano-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



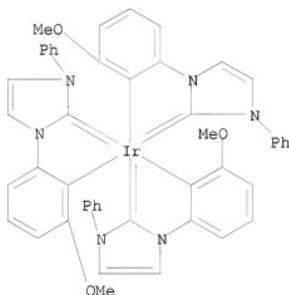
RN 895556-21-5 CAPLUS

CN Iridium, tris[(6-nitro-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



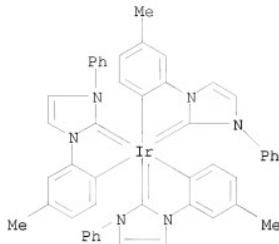
RN 895556-22-6 CAPLUS

CN Iridium, tris[(6-methoxy-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



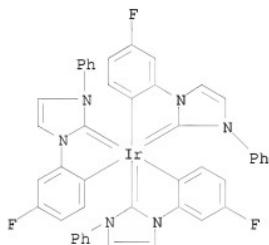
RN 895556-23-7 CAPLUS

CN Iridium, tris[(4-methyl-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



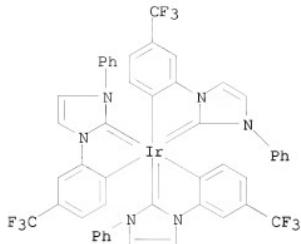
RN 895556-24-8 CAPLUS

CN Iridium, tris[(4-fluoro-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



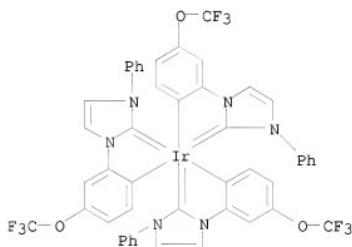
RN 895556-25-9 CAPLUS

CN Iridium, tris[(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)(5-(trifluoromethyl)-1,2-phenylene)]- (9CI) (CA INDEX NAME)



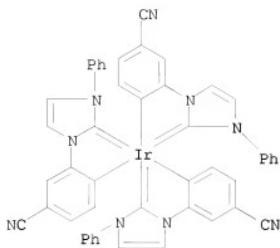
RN 895556-26-0 CAPLUS

CN Iridium, tris[(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene){5-(trifluoromethoxy)-1,2-phenylene}]- (9CI) (CA INDEX NAME)



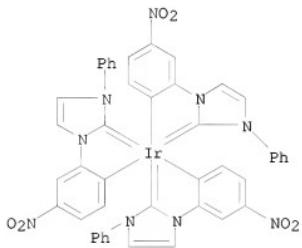
RN 895556-27-1 CAPLUS

CN Iridium, tris[(4-cyano-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



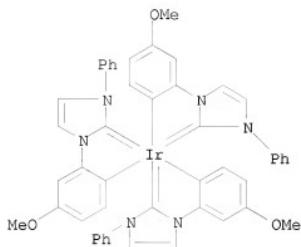
RN 895556-28-2 CAPLUS

CN Iridium, tris[(4-nitro-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



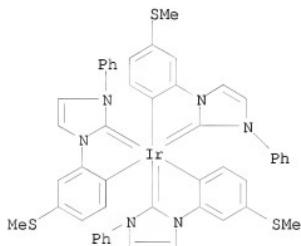
RN 895556-29-3 CAPLUS

CN Iridium, tris[(4-methoxy-1,2-phenylene)(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



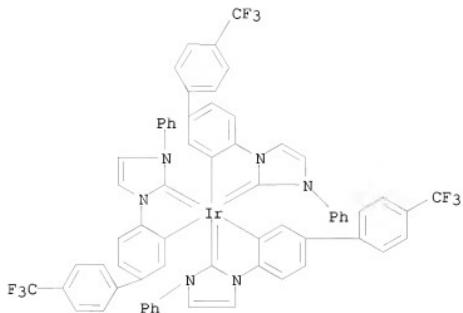
RN 895556-30-6 CAPLUS

CN Iridium, tris[[4-(methylthio)-1,2-phenylene](3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



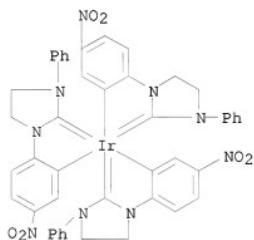
RN 895556-31-7 CAPLUS

CN Iridium, tris[(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene){4'-(trifluoromethyl)[1,1'-biphenyl]-4,3-diyl}] - (9CI) (CA INDEX NAME)



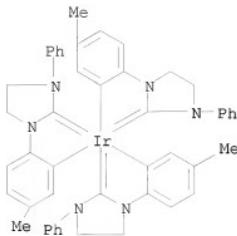
RN 895556-32-8 CAPLUS

CN Iridium, tris[(5-nitro-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



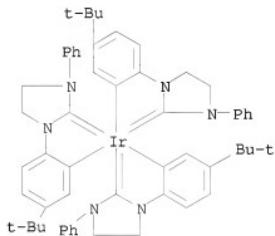
RN 895556-33-9 CAPLUS

CN Iridium, tris[(5-methyl-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



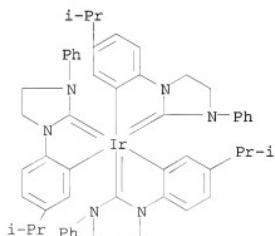
RN 895556-34-0 CAPLUS

CN Iridium, tris[5-(1,1-dimethylethyl)-1,2-phenylene](3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



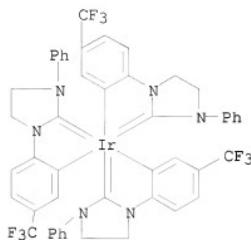
RN 895556-35-1 CAPLUS

CN Iridium, tris[5-(1-methylethyl)-1,2-phenylene](3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



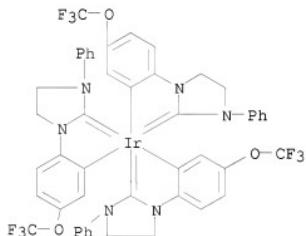
RN 895556-36-2 CAPLUS

CN Iridium, tris[(3-phenyl-1-imidazolidinyl-2-ylidene){4-(trifluoromethyl)-1,2-phenylene}]- (9CI) (CA INDEX NAME)



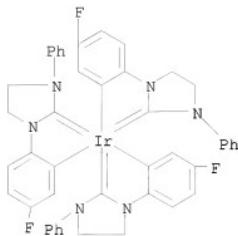
RN 895556-37-3 CAPLUS

CN Iridium, tris[(3-phenyl-1-imidazolidinyl-2-ylidene){4-(trifluoromethoxy)-1,2-phenylene}]- (9CI) (CA INDEX NAME)



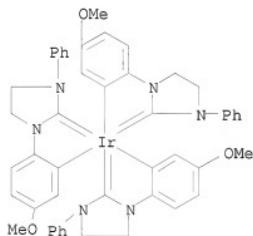
RN 895556-38-4 CAPLUS

CN Iridium, tris[(5-fluoro-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



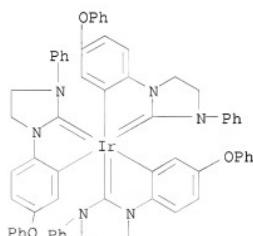
RN 895556-39-5 CAPLUS

CN Iridium, tris[(5-methoxy-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



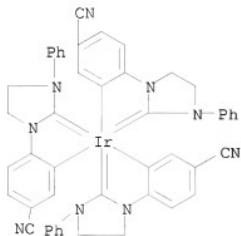
RN 895556-40-8 CAPLUS

CN Iridium, tris[(5-phenoxy-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



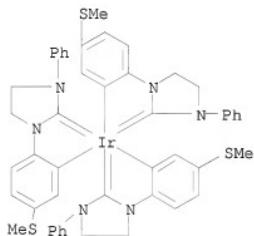
RN 895556-41-9 CAPLUS

CN Iridium, tris[(5-cyano-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



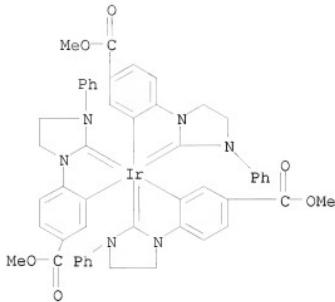
RN 895556-42-0 CAPLUS

CN Iridium, tris[5-(methylthio)-1,2-phenylene](3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



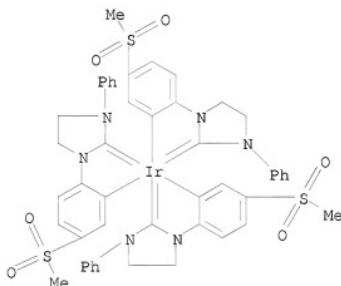
RN 895556-43-1 CAPLUS

CN Iridium, tris[5-(methoxycarbonyl)-1,2-phenylene](3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



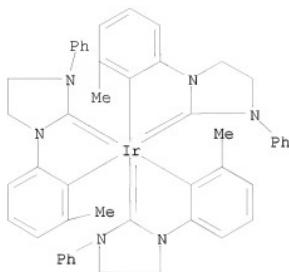
RN 895556-44-2 CAPLUS

CN Iridium, tris[5-(methylsulfonyl)-1,2-phenylene](3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



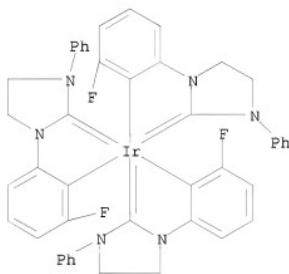
RN 895556-45-3 CAPLUS

CN Iridium, tris[(6-methyl-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895556-46-4 CAPLUS

CN Iridium, tris[(6-fluoro-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



IT 895556-47-5 895556-48-6 895556-49-7
 895556-50-0 895556-51-1 895556-52-2
 895556-53-3 895556-54-4 895556-55-5
 895556-56-6 895556-57-7 895556-58-8
 895556-59-9 895556-60-2 895563-91-4
 895563-92-5 895563-93-6 895563-94-7
 895563-95-8 895563-96-9 895563-97-0
 895563-98-1 895563-99-2 895564-00-8
 895564-01-9 895564-02-0 895564-03-1
 895564-04-2 895564-05-3 895564-06-4
 895564-07-5 895564-08-6 895564-09-7
 895564-10-0 895564-11-1 895564-12-2
 895564-13-3 895564-14-4 895564-15-5
 895564-17-7 895564-18-8 895564-19-9
 895564-21-3 895564-22-4 895564-23-5
 895564-24-6 895564-25-7 895564-26-8
 895564-27-9 895564-28-0 895564-29-1

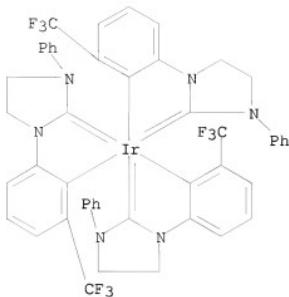
895564-30-4 895564-31-5 895564-32-6
895564-33-7 895564-34-8 895564-35-9
895564-36-0 895564-37-1 895564-38-2
895564-39-3 895564-40-6 895564-41-7
895564-42-8 895564-43-9 895564-44-0
895564-45-1 895564-46-2 895564-47-3
895564-48-4 895564-49-5 895564-50-8
895564-51-9 895564-52-0 895564-53-1
895564-54-2 895564-55-3 895564-56-4
895564-57-5 895564-58-6 895564-59-7
895564-60-0 895564-61-1 895564-62-2
895564-63-3 895564-64-4 895564-65-5
895564-66-6 895564-67-7 895564-68-8
895564-69-9 895564-70-2 895564-71-3
895564-72-4 895564-73-5 895564-74-6
895564-75-7 895564-77-9 895564-78-0
895564-79-1 895564-80-4 895564-81-5
895564-82-6 895564-83-7 895564-84-8
895564-85-9 895564-86-0 895564-87-1
895564-88-2 895564-89-3 895564-90-6
895564-91-7 895564-92-8 895564-93-9
895564-94-0 895564-95-1 895564-96-2
895564-97-3 895564-98-4 895564-99-5
895565-00-1 895565-01-2 895565-02-3
895565-03-4 895565-04-5 895565-05-6
895565-06-7 895565-07-8 895565-08-9
895565-09-0 895565-10-3 895565-11-4
895565-12-5 895565-13-6 895565-14-7
895565-15-8 895565-16-9 895565-17-0
895565-18-1 895565-19-2 895565-20-5
895565-21-6 895565-22-7 895565-23-8
895565-24-9 895565-25-0 895565-26-1
895565-27-2 895565-28-3 895565-29-4
895565-30-7

RL: DEV (Device component use); USES (Uses)

(metal complexes with nucleophilic carbene ligands and devices and
processes using them)

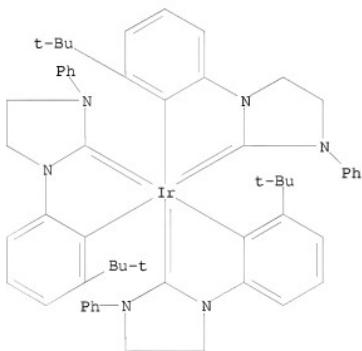
RN 89556-47-5 CAPLUS

CN Iridium, tris[(3-phenyl-1-imidazolidinyl-2-ylidene){3-(trifluoromethyl)-
1,2-phenylene}]- (9CI) (CA INDEX NAME)



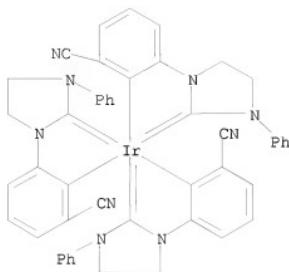
RN 895556-48-6 CAPLUS

CN Iridium, tris[(6-(1,1-dimethylethyl)-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



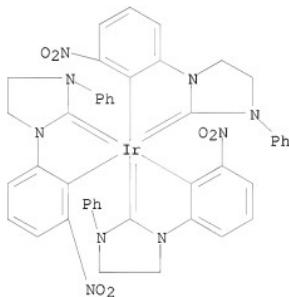
RN 895556-49-7 CAPLUS

CN Iridium, tris[(6-cyano-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



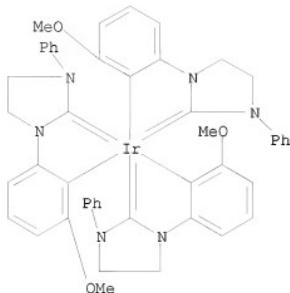
RN 895556-50-0 CAPLUS

CN Iridium, tris[(6-nitro-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



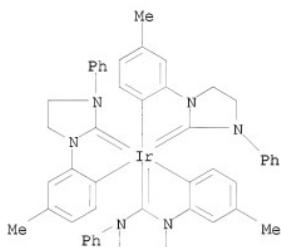
RN 895556-51-1 CAPLUS

CN Iridium, tris[(6-methoxy-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



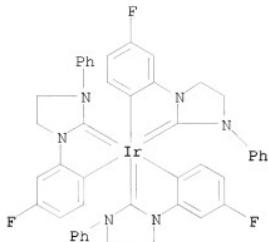
RN 89556-52-2 CAPLUS

CN Iridium, tris[(4-methyl-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



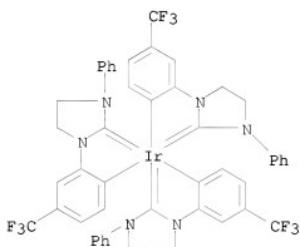
RN 89556-53-3 CAPLUS

CN Iridium, tris[(4-fluoro-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



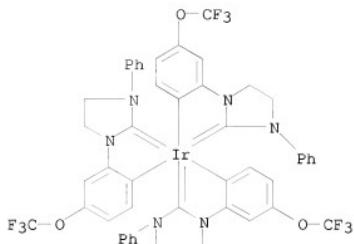
RN 895556-54-4 CAPLUS

CN Iridium, tris[(3-phenyl-1-imidazolidinyl-2-ylidene){5-(trifluoromethyl)-1,2-phenylene}]- (9CI) (CA INDEX NAME)



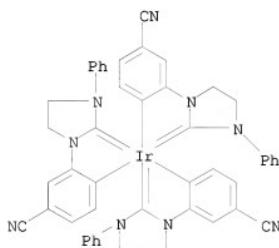
RN 895556-55-5 CAPLUS

CN Iridium, tris[(3-phenyl-1-imidazolidinyl-2-ylidene){5-(trifluoromethoxy)-1,2-phenylene}]- (9CI) (CA INDEX NAME)



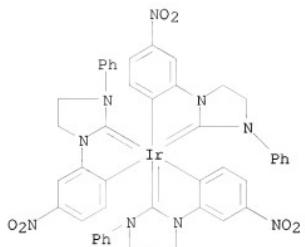
RN 89556-56-6 CAPLUS

CN Iridium, tris[(4-cyano-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



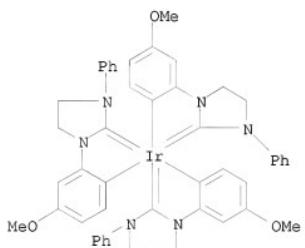
RN 89556-57-7 CAPLUS

CN Iridium, tris[(4-nitro-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



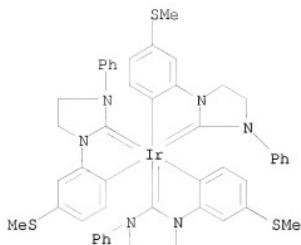
RN 89556-58-8 CAPLUS

CN Iridium, tris[(4-methoxy-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



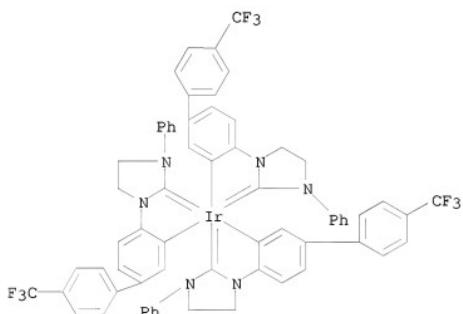
RN 89556-59-9 CAPLUS

CN Iridium, tris[(4-(methylthio)-1,2-phenylene)(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



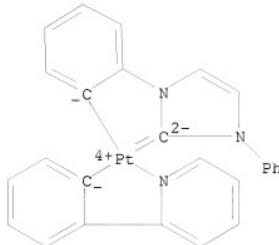
RN 89556-60-2 CAPLUS

CN Iridium, tris[(3-phenyl-1-imidazolidinyl-2-ylidene)[4'-(trifluoromethyl)-1,1'-biphenyl]-4,3-diyl]- (9CI) (CA INDEX NAME)



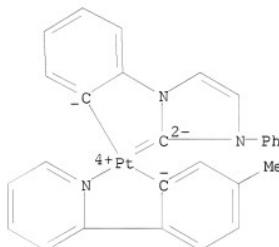
RN 895563-91-4 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)][2-(2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)



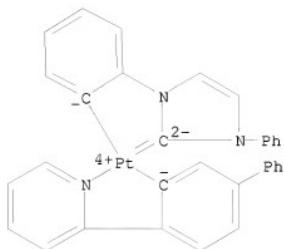
RN 895563-92-5 CAPLUS

CN Platinum, [5-methyl-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



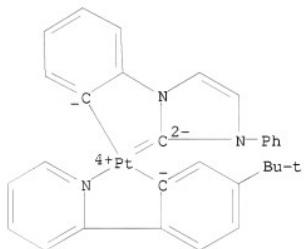
RN 895563-93-6 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]bis[4-(2-pyridinyl- κ N)[1,1'-biphenyl]-3-yl- κ C]- (9CI) (CA INDEX NAME)



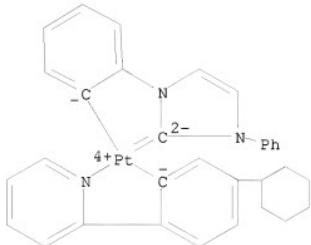
RN 895563-94-7 CAPLUS

CN Platinum, [5-(1,1-dimethylethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



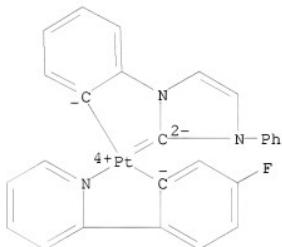
RN 895563-95-8 CAPLUS

CN Platinum, [5-cyclohexyl-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



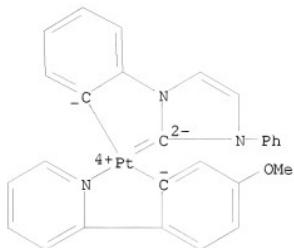
RN 895563-96-9 CAPLUS

CN Platinum, [5-fluoro-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



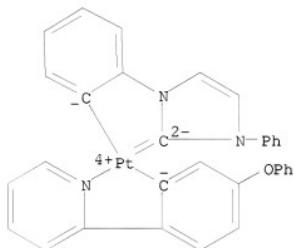
RN 895563-97-0 CAPLUS

CN Platinum, [5-methoxy-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



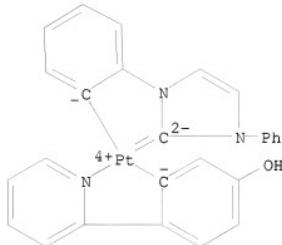
RN 895563-98-1 CAPLUS

CN Platinum, [5-phenoxy-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



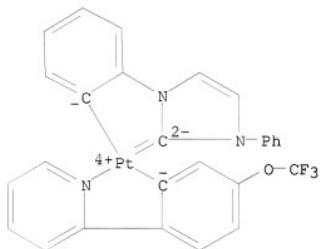
RN 895563-99-2 CAPLUS

CN Platinum, [5-hydroxy-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



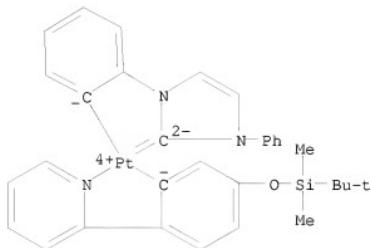
RN 895564-00-8 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)][2-(2-pyridinyl- κ N)-5-(trifluoromethoxy)phenyl- κ C]- (9CI) (CA INDEX NAME)



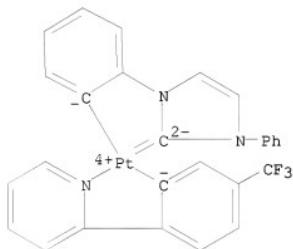
RN 895564-01-9 CAPLUS

CN Platinum, [5-[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



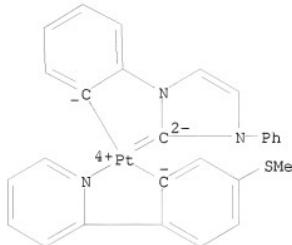
RN 895564-02-0 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)][2-(2-pyridinyl- κN)-5-(trifluoromethyl)phenyl- κC]- (9CI) (CA INDEX NAME)



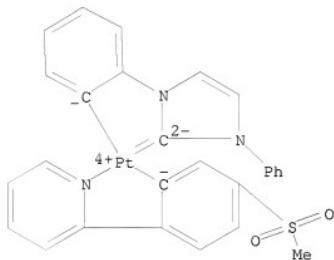
RN 895564-03-1 CAPLUS

CN Platinum, [5-(methylthio)-2-(2-pyridinyl- κN)phenyl- κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



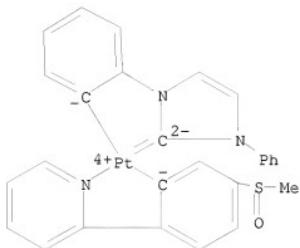
RN 895564-04-2 CAPLUS

CN Platinum, [5-(methylsulfonyl)-2-(2-pyridinyl-kN)phenyl-kC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



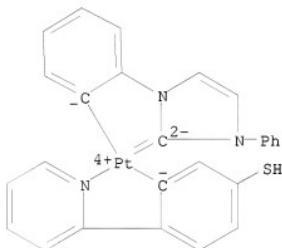
RN 895564-05-3 CAPLUS

CN Platinum, [5-(methylsulfinyl)-2-(2-pyridinyl-kN)phenyl-kC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



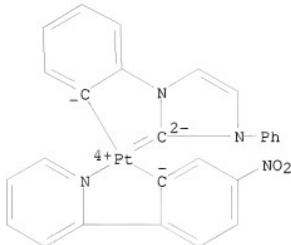
RN 895564-06-4 CAPLUS

CN Platinum, [5-mercaptop-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



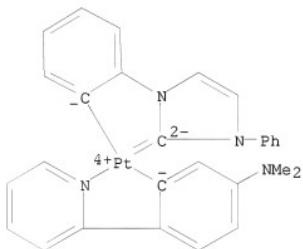
RN 895564-07-5 CAPLUS

CN Platinum, [5-nitro-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



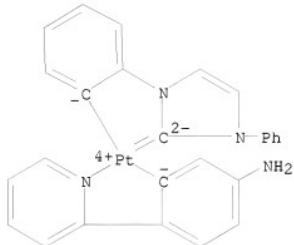
RN 895564-08-6 CAPLUS

CN Platinum, [5-(dimethylamino)-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



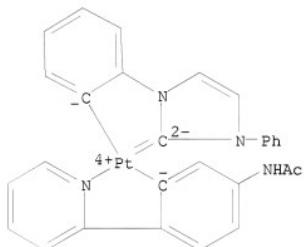
RN 895564-09-7 CAPLUS

CN Platinum, [5-amino-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



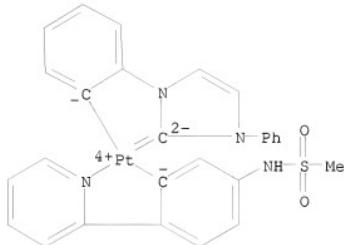
RN 895564-10-0 CAPLUS

CN Platinum, [5-(acetylaminio)-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



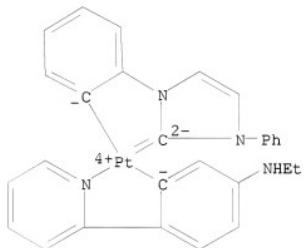
RN 895564-11-1 CAPLUS

CN Platinum, [5-((methylsulfonyl)amino)-2-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



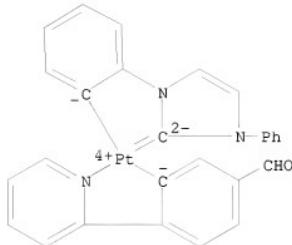
RN 895564-12-2 CAPLUS

CN Platinum, [5-(ethylamino)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



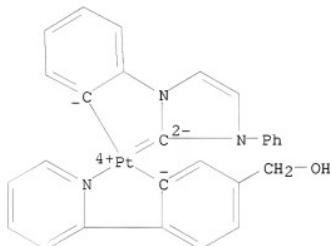
RN 895564-13-3 CAPLUS

CN Platinum, [5-formyl-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



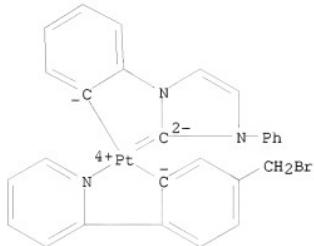
RN 895564-14-4 CAPLUS

CN Platinum, [5-(hydroxymethyl)-2-(2-pyridinyl-kN)phenyl-kC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



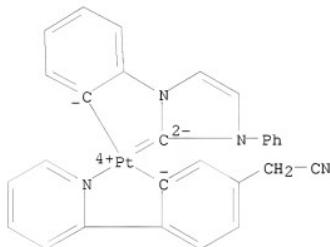
RN 895564-15-5 CAPLUS

CN Platinum, [5-(bromomethyl)-2-(2-pyridinyl-kN)phenyl-kC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



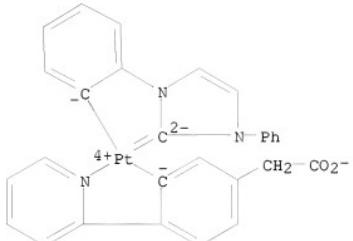
RN 895564-17-7 CAPLUS

CN Platinum, [5-(cyanomethyl)-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



RN 895564-18-8 CAPLUS

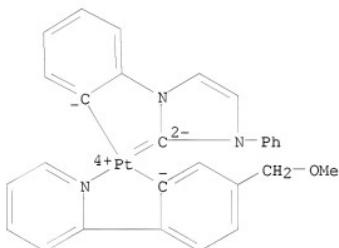
CN Platinato(1-), [5-(carboxylatomethyl)-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}-, hydrogen (9CI) (CA INDEX NAME)



● H^+

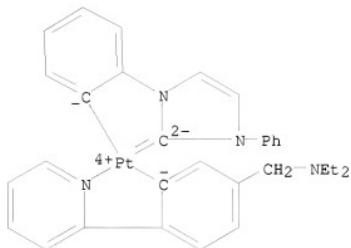
RN 895564-19-9 CAPLUS

CN Platinum, [5-(methoxymethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

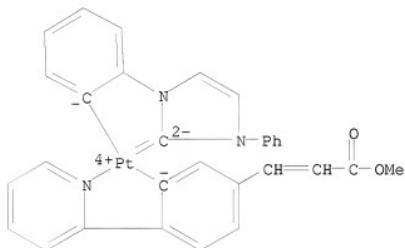


RN 895564-21-3 CAPLUS

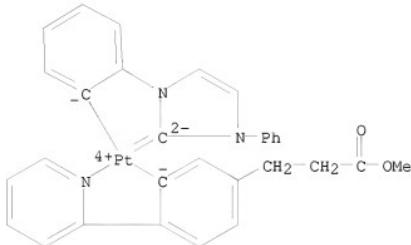
CN Platinum, [5-[(diethylamino)methyl]-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



RN 895564-22-4 CAPLUS
CN Platinum, [5-(3-methoxy-3-oxo-1-propenyl)-2-(2-pyridinyl- κ N)phenyl- κ C] [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)

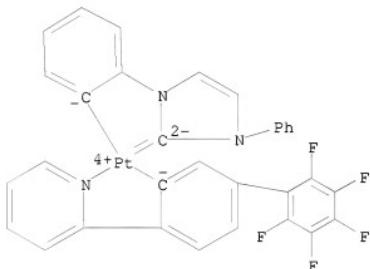


RN 895564-23-5 CAPLUS
CN Platinum, [5-(3-methoxy-3-oxopropyl)-2-(2-pyridinyl- κ N)phenyl- κ C] [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



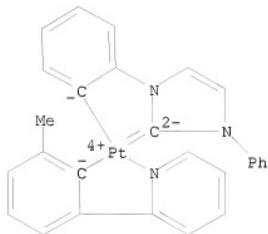
RN 895564-24-6 CAPLUS

CN Platinum, [2',3',4',5',6'-pentafluoro-4-(2-pyridinyl- κ N)[1,1'-biphenyl]-3-yl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



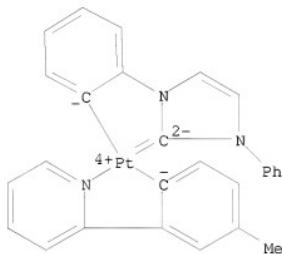
RN 895564-25-7 CAPLUS

CN Platinum, [2-methyl-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



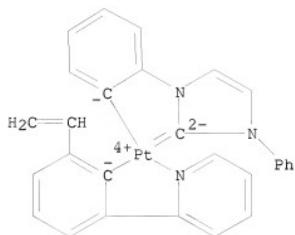
RN 895564-26-8 CAPLUS

CN Platinum, [4-methyl-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



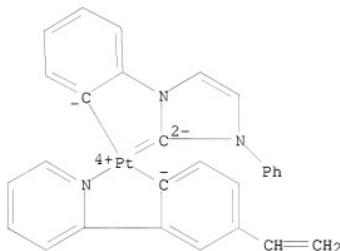
RN 895564-27-9 CAPLUS

CN Platinum, [2-ethenyl-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



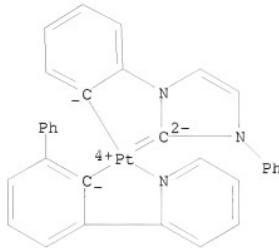
RN 895564-28-0 CAPLUS

CN Platinum, [4-ethenyl-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



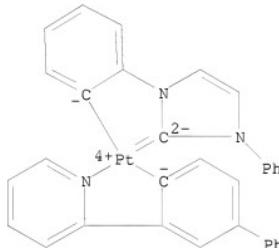
RN 895564-29-1 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)][3-(2-pyridinyl- κ N)[1,1'-biphenyl]-2-yl- κ C]- (9CI) (CA INDEX NAME)



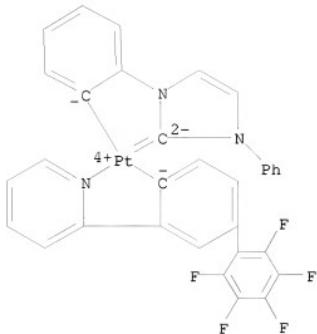
RN 895564-30-4 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)][3-(2-pyridinyl-κN)[1,1'-biphenyl]-4-yl-κC]- (9CI) (CA INDEX NAME)



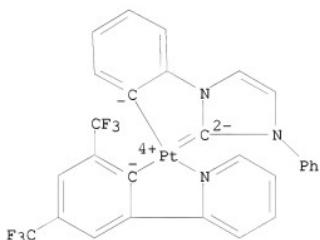
RN 895564-31-5 CAPLUS

CN Platinum, [2',3',4',5',6'-pentafluoro-3-(2-pyridinyl-κN)[1,1'-biphenyl]-4-yl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



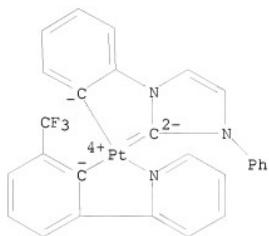
RN 895564-32-6 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]{2-(2-pyridinyl- κ N)-4,6-bis(trifluoromethyl)phenyl- κ C}- (9CI) (CA INDEX NAME)



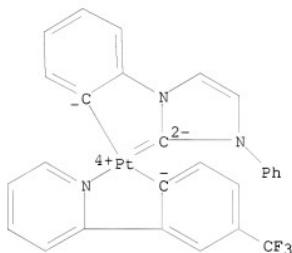
RN 895564-33-7 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]{2-(2-pyridinyl- κ N)-6-(trifluoromethyl)phenyl- κ C}- (9CI) (CA INDEX NAME)



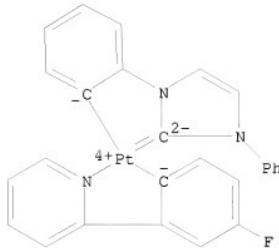
RN 895564-34-8 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)][2-(2-pyridinyl- κ N)-4-(trifluoromethyl)phenyl- κ C]- (9CI) (CA INDEX NAME)



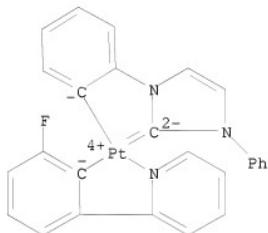
RN 895564-35-9 CAPLUS

CN Platinum, [4-fluoro-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)]- (9CI) (CA INDEX NAME)



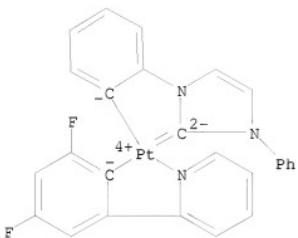
RN 895564-36-0 CAPLUS

CN Platinum, [2-fluoro-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



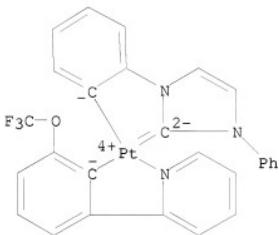
RN 895564-37-1 CAPLUS

CN Platinum, [2,4-difluoro-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



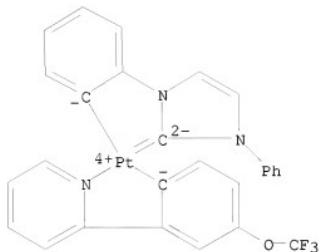
RN 895564-38-2 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)][2-(2-pyridinyl- κ N)-6-(trifluoromethoxy)phenyl- κ C]- (9CI) (CA INDEX NAME)



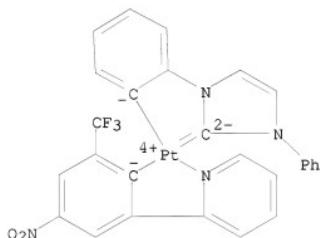
RN 895564-39-3 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)][2-(2-pyridinyl- κ N)-4-(trifluoromethoxy)phenyl- κ C]- (9CI) (CA INDEX NAME)



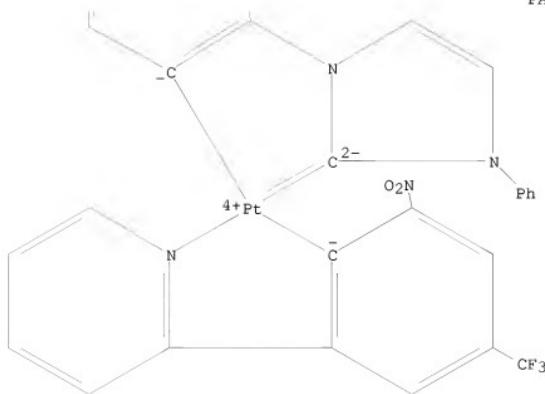
RN 895564-40-6 CAPLUS

CN Platinum, [4-nitro-2-(2-pyridinyl- κN)-6-(trifluoromethyl)phenyl- κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



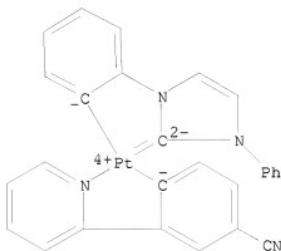
RN 895564-41-7 CAPLUS

CN Platinum, [2-nitro-6-(2-pyridinyl- κN)-4-(trifluoromethyl)phenyl- κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



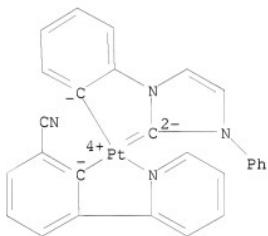
RN 895564-42-8 CAPLUS
CN Platinum, [4-cyano-2-(2-pyridinyl-κN)phenyl-κC] [1, 2-

phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX
NAME)



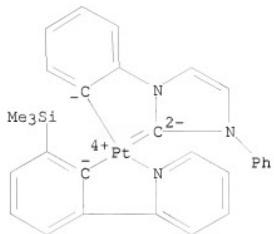
RN 895564-43-9 CAPLUS

CN Platinum, [2-cyano-6-(2-pyridinyl- κN)phenyl- κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX
NAME)



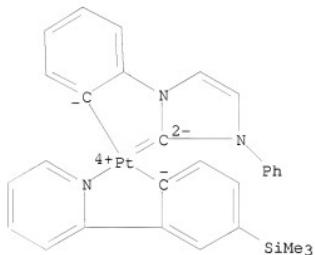
RN 895564-44-0 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)][2-(2-pyridinyl- κN)-6-(trimethylsilyl)phenyl- κC]- (9CI) (CA INDEX
NAME)



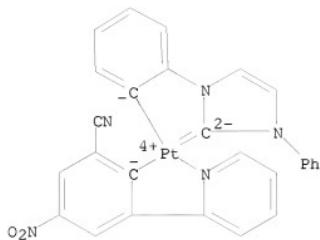
RN 895564-45-1 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)][2-(2-pyridinyl- κ N)-4-(trimethylsilyl)phenyl- κ C]- (9CI) (CA INDEX NAME)



RN 895564-46-2 CAPLUS

CN Platinum, [2-cyano-4-nitro-6-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)]- (9CI) (CA INDEX NAME)



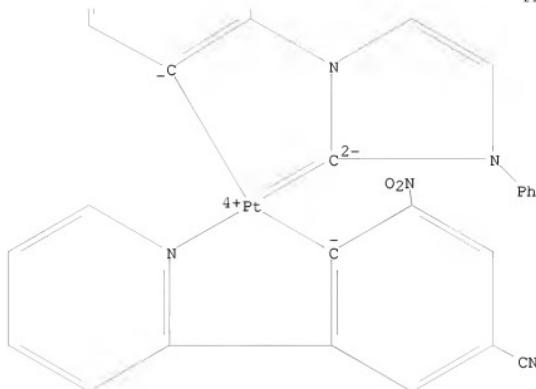
RN 895564-47-3 CAPLUS

CN Platinum, [4-cyano-2-nitro-6-(2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



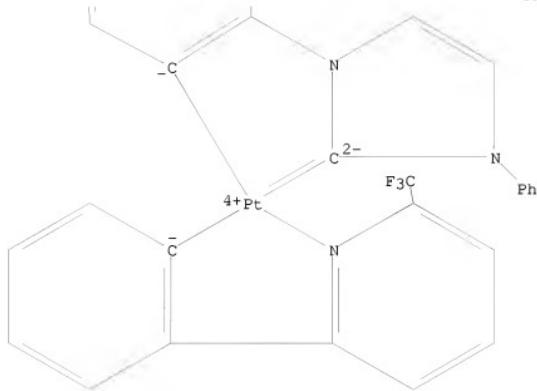
RN 895564-48-4 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]{2-[6-(trifluoromethyl)-2-pyridinyl- κ N]phenyl- κ C}- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



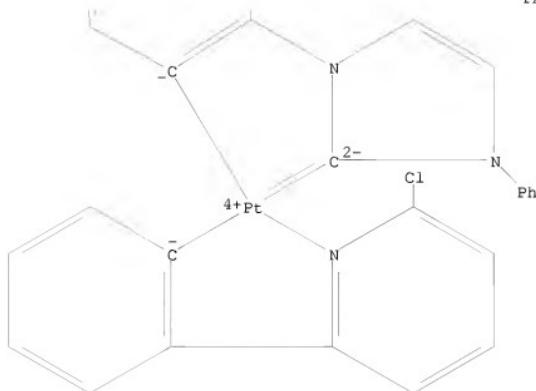
RN 895564-49-5 CAPLUS

CN Platinum, [2-(6-chloro-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



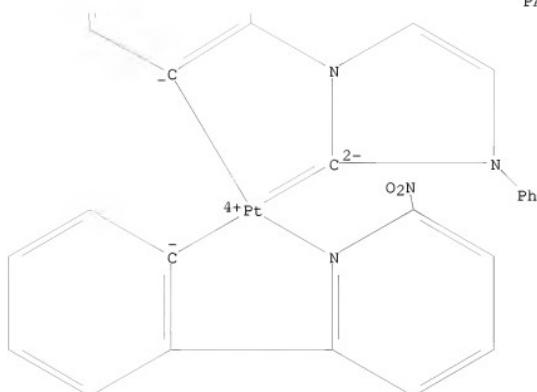
RN 895564-50-8 CAPLUS
CN Platinum, [2-(6-nitro-2-pyridyl- κ N)phenyl- κ C] [1, 2-

phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX
NAME)

PAGE 1-A



PAGE 2-A



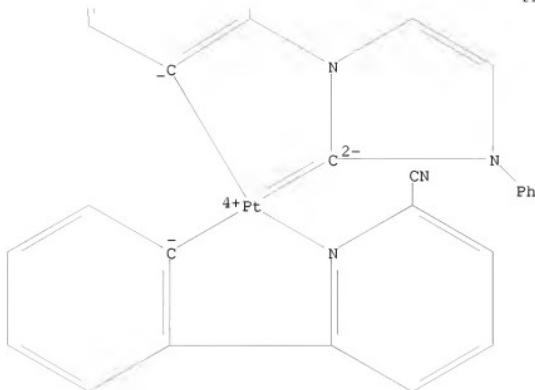
RN 895564-51-9 CAPLUS

CN Platinum, [2-(6-cyano-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



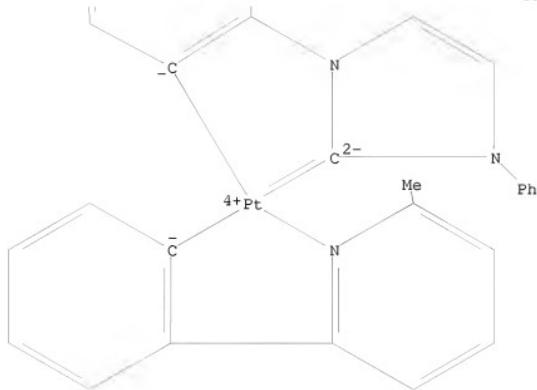
RN 895564-52-0 CAPLUS

CN Platinum, [2-(6-methyl-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)

PAGE 1-A

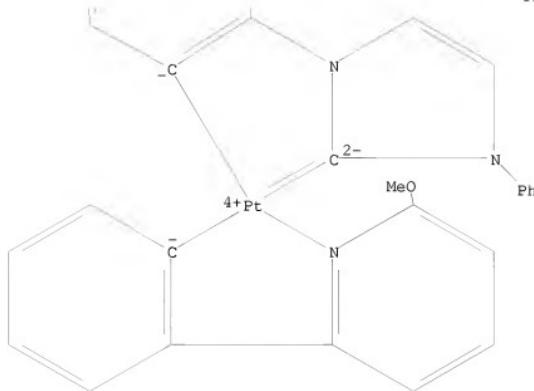


PAGE 2-A



RN 895564-53-1 CAPLUS

CN Platinum, [2-(6-methoxy-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



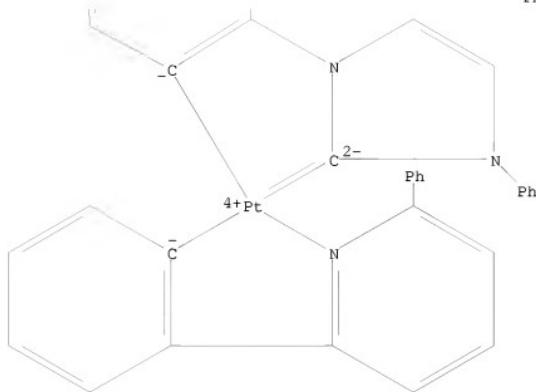
RN 895564-54-2 CAPLUS
CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]{2-(6-

phenyl-2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

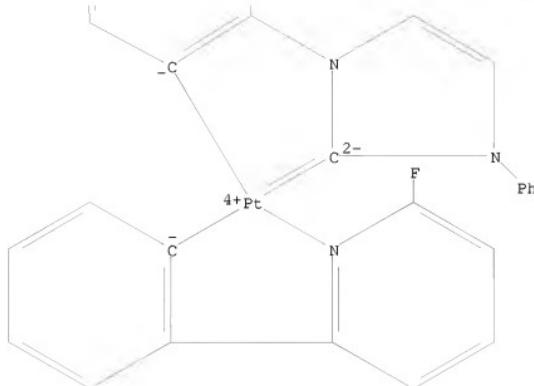


RN 895564-55-3 CAPLUS
CN Platinum, [2-(6-fluoro-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}]- (9CI) (CA INDEX NAME)

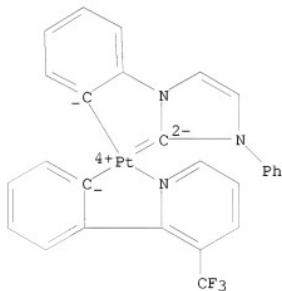
PAGE 1-A



PAGE 2-A

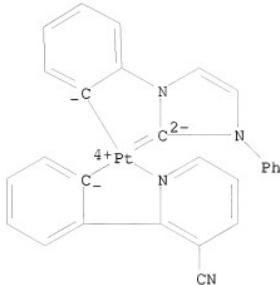


RN 895564-56-4 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)][2-[3-(trifluoromethyl)-2-pyridinyl- κ N]phenyl- κ C]- (9CI) (CA INDEX NAME)

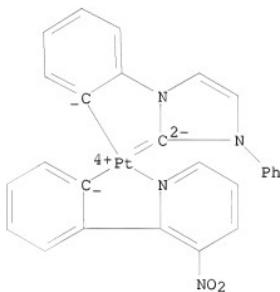
RN 895564-57-5 CAPLUS

CN Platinum, [2-(3-cyano-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



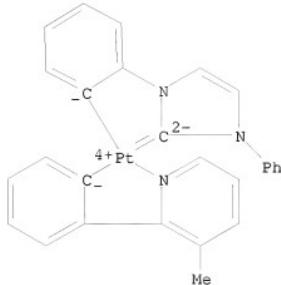
RN 895564-58-6 CAPLUS

CN Platinum, [2-(3-nitro-2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



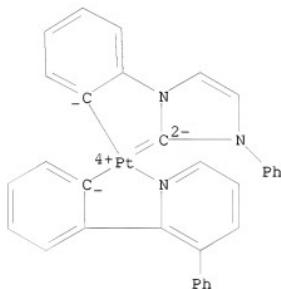
RN 895564-59-7 CAPLUS

CN Platinum, [2-(3-methyl-2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



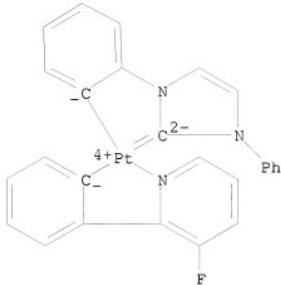
RN 895564-60-0 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]{2-(3-phenyl-2-pyridinyl- κ N)phenyl- κ C}- (9CI) (CA INDEX NAME)



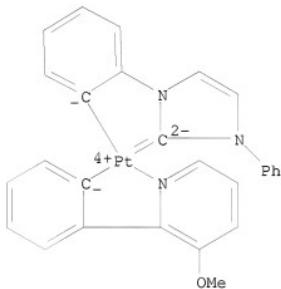
RN 895564-61-1 CAPLUS

CN Platinum, [2-(3-fluoro-2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



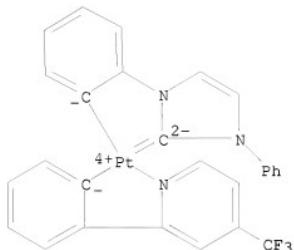
RN 895564-62-2 CAPLUS

CN Platinum, [2-(3-methoxy-2-pyridinyl-κN)phenyl-κC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



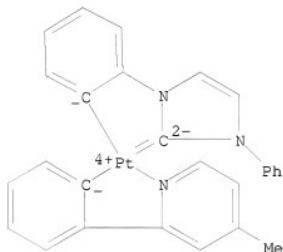
RN 895564-63-3 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)][2-[4-(trifluoromethyl)-2-pyridinyl-κN]phenyl-κC]- (9CI) (CA INDEX NAME)



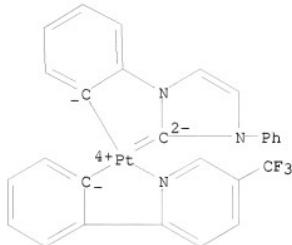
RN 895564-64-4 CAPLUS

CN Platinum, [2-(4-methyl-2-pyridinyl-kN)phenyl-kC]{1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)}- (9CI) (CA INDEX NAME)



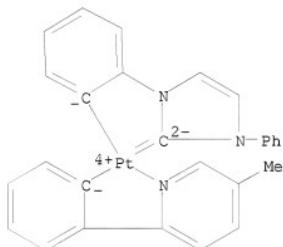
RN 895564-65-5 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]{2-[5-(methyl)-2-pyridinyl-kN]phenyl-kC}- (9CI) (CA INDEX NAME)



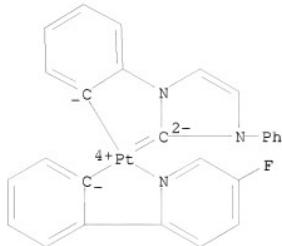
RN 895564-66-6 CAPLUS

CN Platinum, [2-(5-methyl-2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



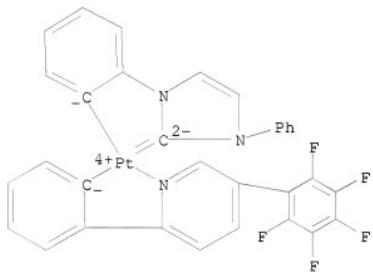
RN 895564-67-7 CAPLUS

CN Platinum, [2-(5-fluoro-2-pyridinyl-κN)phenyl-κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



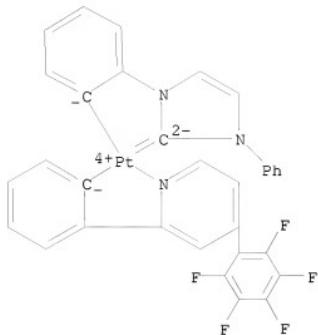
RN 895564-68-8 CAPLUS

CN Platinum, [2-[5-(pentafluorophenyl)-2-pyridinyl- κ N]phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)

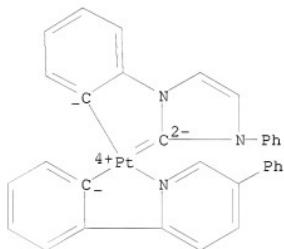


RN 895564-69-9 CAPLUS

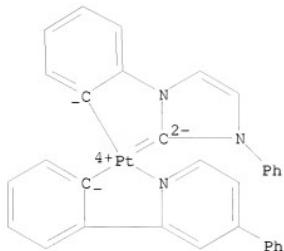
CN Platinum, [2-[4-(pentafluorophenyl)-2-pyridinyl- κ N]phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



RN 895564-70-2 CAPLUS
CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]{2-[(5-phenyl-2-pyridinyl-κN)phenyl-κC]}- (9CI) (CA INDEX NAME)

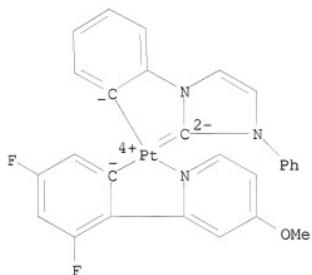


RN 895564-71-3 CAPLUS
CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]{2-[(4-phenyl-2-pyridinyl-κN)phenyl-κC]}- (9CI) (CA INDEX NAME)



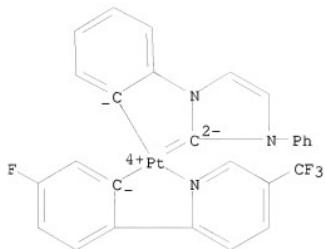
RN 895564-72-4 CAPLUS

CN Platinum, [3,5-difluoro-2-(4-methoxy-2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



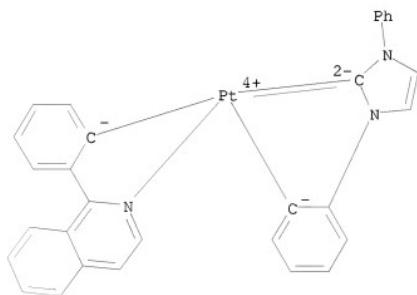
RN 895564-73-5 CAPLUS

CN Platinum, [5-fluoro-2-[5-(trifluoromethyl)-2-pyridinyl- κ N]phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



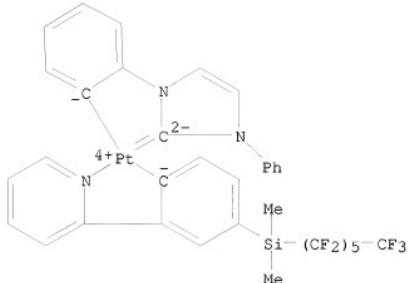
RN 895564-74-6 CAPLUS

CN Platinum, [2-(1-isoquinolinyl- κN)phenyl- κC][1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)]- (9CI) (CA INDEX NAME)



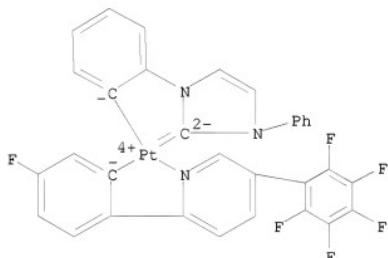
RN 895564-75-7 CAPLUS

CN Platinum, [4-[dimethyl(tridecafluorohexyl)silyl]-2-(2-pyridinyl- κN)phenyl- κC][1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)]- (9CI) (CA INDEX NAME)



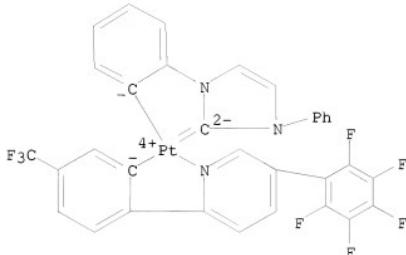
RN 895564-77-9 CAPLUS

CN Platinum, [5-fluoro-2-[5-(pentafluorophenyl)-2-pyridinyl- κN]phenyl- κC][1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)]- (9CI)
(CA INDEX NAME)



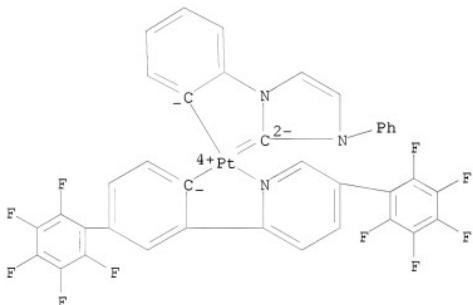
RN 895564-78-0 CAPLUS

CN Platinum, [2-[5-(pentafluorophenyl)-2-pyridinyl- κN]-5-(trifluoromethyl)phenyl- κC][1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)]- (9CI) (CA INDEX NAME)



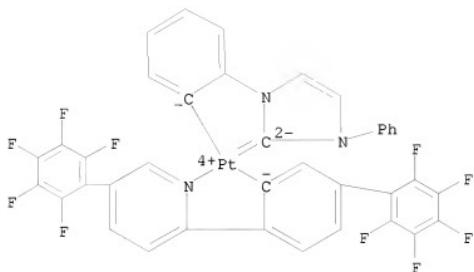
BN 895564-79-1 CAPLUS

RN 6559-75-1
CN Platinum, [2',3',4',5',6'-pentafluoro-3-[5-(pentafluorophenyl)-2-pyridinyl-
kN][1,1'-biphenyl]-4-yl-kNc] [1,2-phenylene(3-phenyl-1H-imidazol-
1-yl-2-(3H)-ylidene)]- (9CI) (CA INDEX NAME)



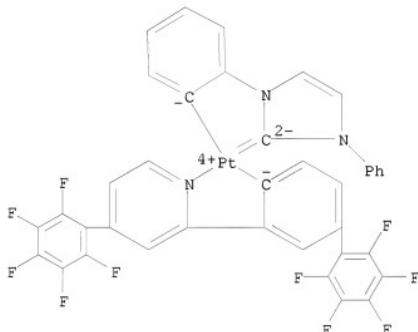
BN 895564-80-4 CAPLUS

RN 6934-94-4
 CA [3]
 CN Platinum-[2',3',4',5',6'-pentafluoro-4-[5-(pentafluorophenyl)-2-pyridinyl-
 kN][1,1'-biphenyl]-3-yl-kC]-[1,2-phenylene(3-phenyl-1H-imidazol-
 1-yl)-2-(3H)-ylidene]-
 (9CI) (CA INDEX NAME)



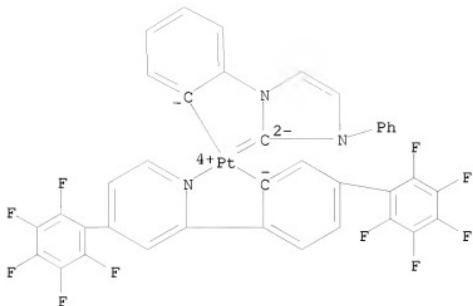
RN 895564-81-5 CAPLUS

CN Platinum, [2',3',4',5',6'-pentafluoro-3-[4-(pentafluorophenyl)-2-pyridinyl-
κN][1,1'-biphenyl]-4-yl-κC][1,2-phenylene(3-phenyl-1H-imidazol-
1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



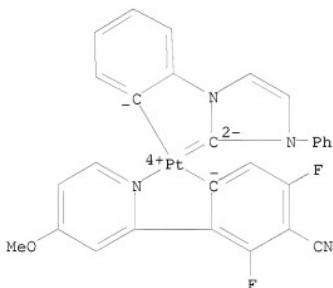
RN 895564-82-6 CAPLUS

CN Platinum, [2',3',4',5',6'-pentafluoro-4-[4-(pentafluorophenyl)-2-pyridinyl-
κN][1,1'-biphenyl]-3-yl-κC][1,2-phenylene(3-phenyl-1H-imidazol-
1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



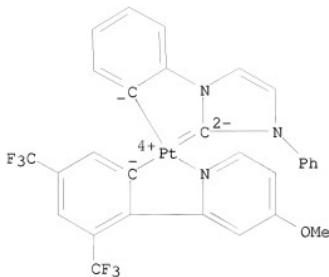
RN 895564-83-7 CAPLUS

CN Platinum, [4-cyano-3,5-difluoro-2-(4-methoxy-2-pyridinyl- κN)phenyl- κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



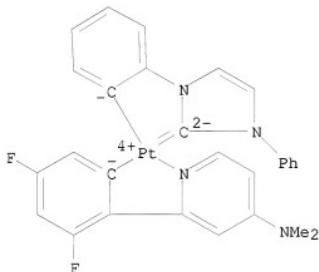
RN 895564-84-8 CAPLUS

CN Platinum, [2-(4-methoxy-2-pyridinyl- κN)-3,5-bis(trifluoromethyl)phenyl- κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



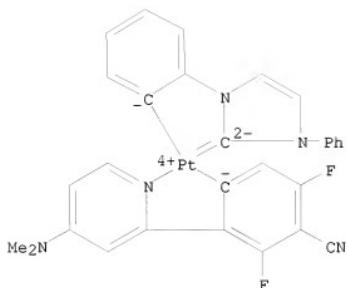
RN 895564-85-9 CAPLUS

CN Platinum, [2-[4-(dimethylamino)-2-pyridinyl- κN]-3,5-difluorophenyl- κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI)
(CA INDEX NAME)



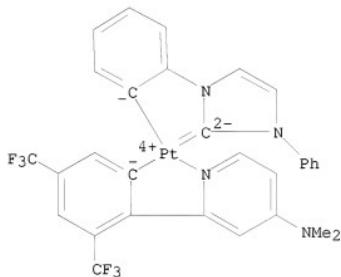
RN 895564-86-0 CAPLUS

CN Platinum, [4-cyano-2-[4-(dimethylamino)-2-pyridinyl- κN]-3,5-difluorophenyl- κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



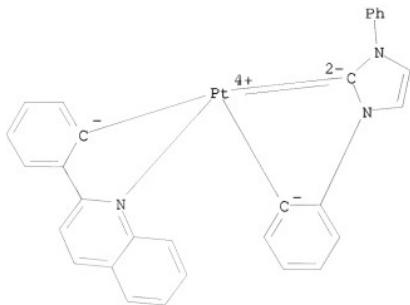
RN 895564-87-1 CAPLUS

CN Platinum, [2-[4-(dimethylamino)-2-pyridinyl- κN]-3,5-bis(trifluoromethyl)phenyl- κC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



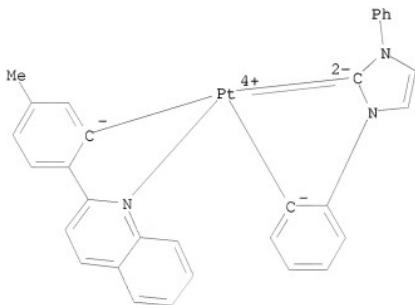
RN 895564-88-2 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)][2-(2-quinolinyl- κN)phenyl- κC]- (9CI) (CA INDEX NAME)



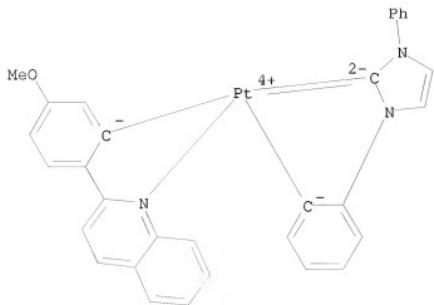
RN 895564-89-3 CAPLUS

CN Platinum, [5-methyl-2-(2-quinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



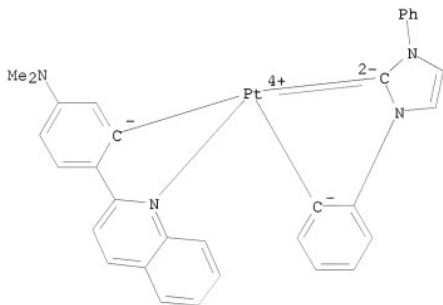
RN 895564-90-6 CAPLUS

CN Platinum, [5-methoxy-2-(2-quinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



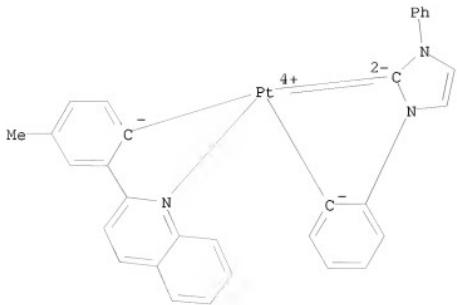
RN 895564-91-7 CAPLUS

CN Platinum, [5-(dimethylamino)-2-(2-quinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)]- (9CI) (CA INDEX NAME)



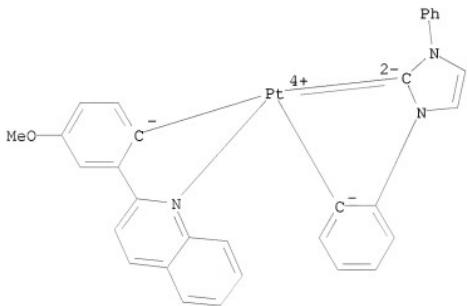
RN 895564-92-8 CAPLUS

CN Platinum, [4-methyl-2-(2-quinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)]- (9CI) (CA INDEX NAME)



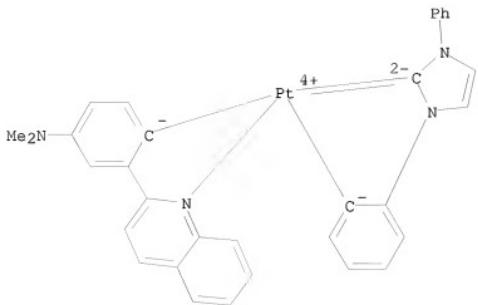
RN 895564-93-9 CAPLUS

CN Platinum, [4-methoxy-2-(2-quinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



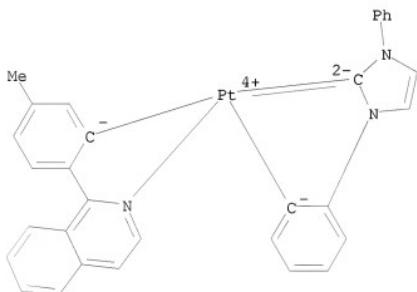
RN 895564-94-0 CAPLUS

CN Platinum, [4-(dimethylamino)-2-(2-quinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



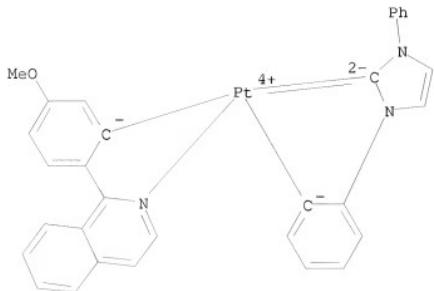
RN 895564-95-1 CAPLUS

CN Platinum, [2-(1-isoquinolinyl-kN)-5-methylphenyl-kC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



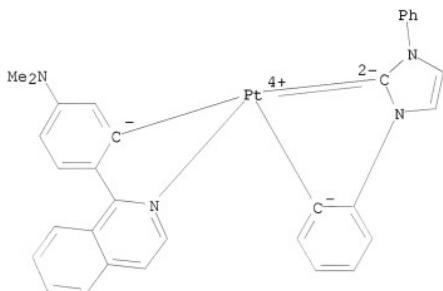
RN 895564-96-2 CAPLUS

CN Platinum, [2-(1-isoquinolinyl-kN)-5-methoxyphenyl-kC][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



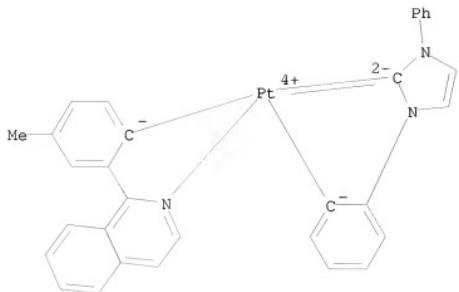
RN 895564-97-3 CAPLUS

CN Platinum, [5-(dimethylamino)-2-(1-isoquinolinyl- κN)phenyl- κC][1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)]- (9CI)
(CA INDEX NAME)



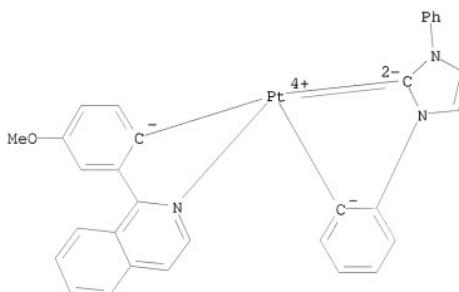
RN 895564-98-4 CAPLUS

CN Platinum, [2-(1-isoquinolinyl- κN)-4-methylphenyl- κC][1,2-phenylene(3-phenyl-1*H*-imidazol-1-yl-2(3*H*)-ylidene)]- (9CI) (CA INDEX NAME)



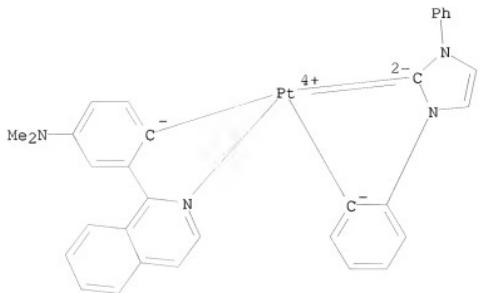
RN 895564-99-5 CAPLUS

CN Platinum, [2-(1-isoquinolinyl- κ N)-4-methoxyphenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



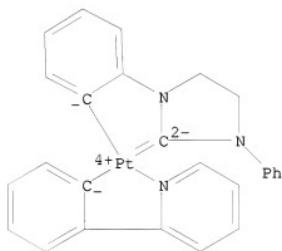
RN 895565-00-1 CAPLUS

CN Platinum, [4-(dimethylamino)-2-(1-isoquinolinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1H-imidazol-1-yl-2(3H)-ylidene)]- (9CI) (CA INDEX NAME)



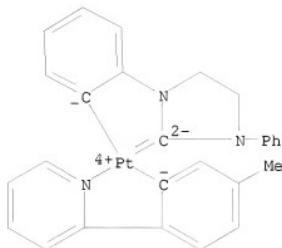
RN 895565-01-2 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(2-pyridinyl- κ N)phenyl- κ C]- (9CI) (CA INDEX NAME)



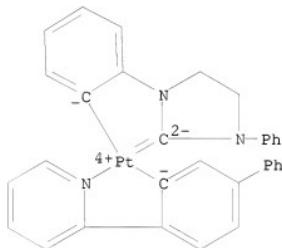
RN 895565-02-3 CAPLUS

CN Platinum, [5-methyl-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



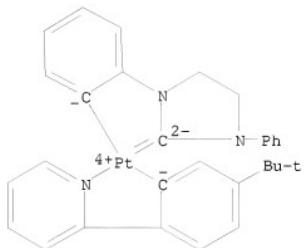
RN 895565-03-4 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][4-(2-pyridinyl- κ N){1,1'-biphenyl}-3-yl- κ C]- (9CI) (CA INDEX NAME)



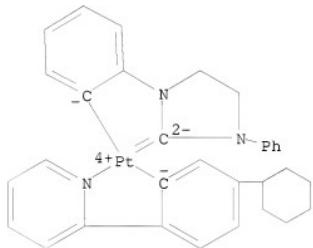
RN 895565-04-5 CAPLUS

CN Platinum, [5-(1,1-dimethylethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



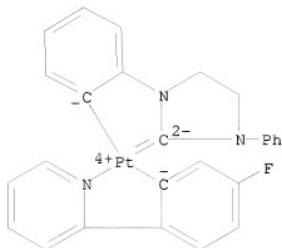
RN 895565-05-6 CAPLUS

CN Platinum, [5-cyclohexyl-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



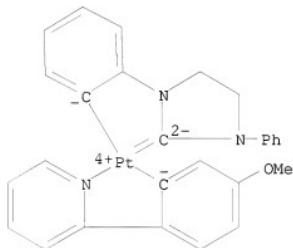
RN 895565-06-7 CAPLUS

CN Platinum, [5-fluoro-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



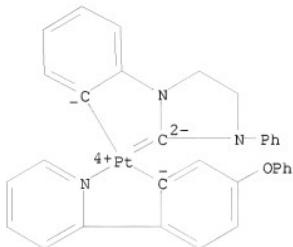
RN 895565-07-8 CAPLUS

CN Platinum, [5-methoxy-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



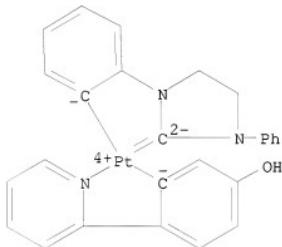
RN 895565-08-9 CAPLUS

CN Platinum, [5-phenoxy-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



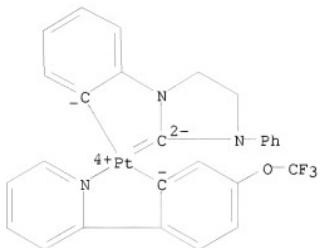
RN 895565-09-0 CAPLUS

CN Platinum, [5-hydroxy-2-(2-pyridinyl- κ N)phenyl- κ C]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



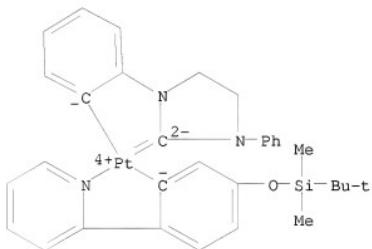
RN 895565-10-3 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]{2-(2-pyridinyl- κ N)-5-(trifluoromethoxy)phenyl- κ C}- (9CI) (CA INDEX NAME)



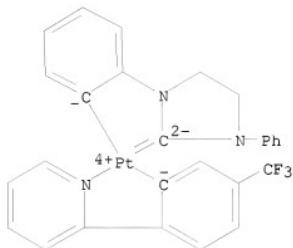
RN 895565-11-4 CAPLUS

CN Platinum, [5-[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-(2-pyridinyl- κN)phenyl-1-imidazolidinyl-2-ylidene]- (9CI) (CA INDEX NAME)



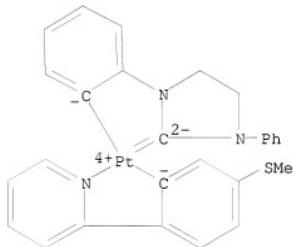
RN 895565-12-5 CAPLUS

CN Platinum, [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][2-(2-pyridinyl- κN)-5-(trifluoromethyl)phenyl- κC]- (9CI) (CA INDEX NAME)



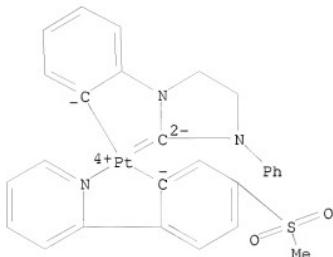
RN 895565-13-6 CAPLUS

CN Platinum, [5-(methylthio)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



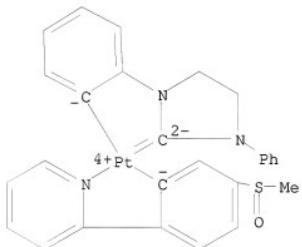
RN 895565-14-7 CAPLUS

CN Platinum, [5-(methylsulfonyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



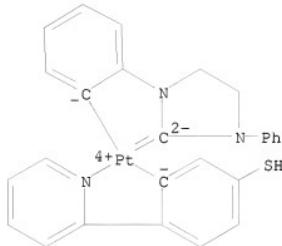
RN 895565-15-8 CAPLUS

CN Platinum, [5-(methylsulfinyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



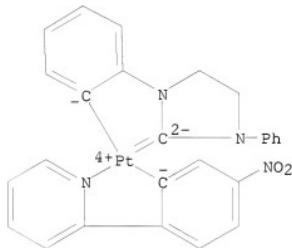
RN 895565-16-9 CAPLUS

CN Platinum, [5-mercpto-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



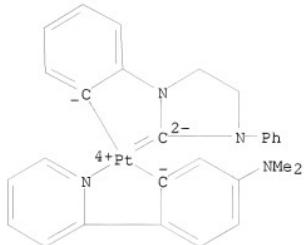
RN 895565-17-0 CAPLUS

CN Platinum, [5-nitro-2-(2-pyridinyl- κN)phenyl- κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



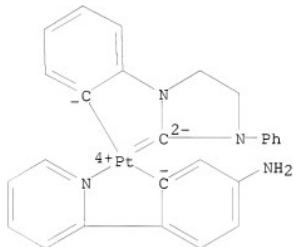
RN 895565-18-1 CAPLUS

CN Platinum, [5-(dimethylamino)-2-(2-pyridinyl- κN)phenyl- κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



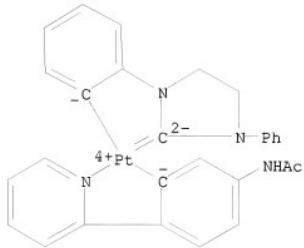
RN 895565-19-2 CAPLUS

CN Platinum, [5-amino-2-(2-pyridinyl-kN)phenyl-kC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



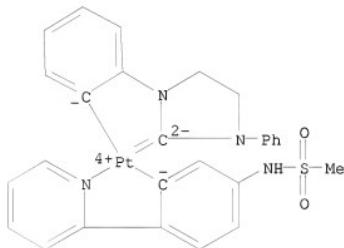
RN 895565-20-5 CAPLUS

CN Platinum, [5-(acetylamino)-2-(2-pyridinyl-kN)phenyl-kC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



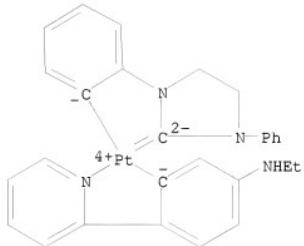
RN 895565-21-6 CAPLUS

CN Platinum, [5-[(methylsulfonyl)amino]-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



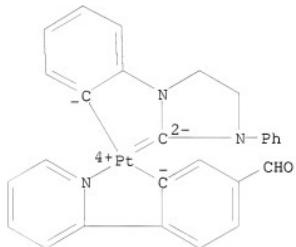
RN 895565-22-7 CAPLUS

CN Platinum, [5-(ethylamino)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



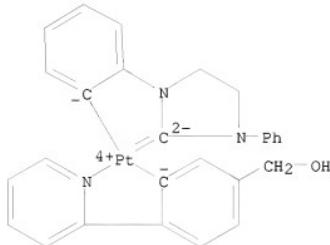
RN 895565-23-8 CAPLUS

CN Platinum, [5-formyl-2-(2-pyridinyl-kN)phenyl-kC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



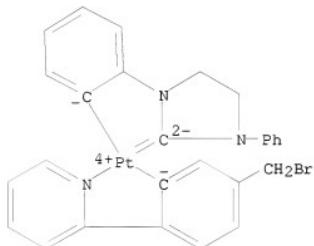
RN 895565-24-9 CAPLUS

CN Platinum, [5-(hydroxymethyl)-2-(2-pyridinyl-kN)phenyl-kC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



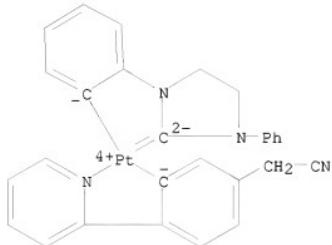
RN 895565-25-0 CAPLUS

CN Platinum, [5-(bromomethyl)-2-(2-pyridinyl- κN)phenyl- κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



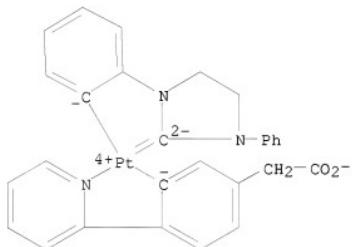
RN 895565-26-1 CAPLUS

CN Platinum, [5-(cyanomethyl)-2-(2-pyridinyl- κN)phenyl- κC]{1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}- (9CI) (CA INDEX NAME)



RN 895565-27-2 CAPLUS

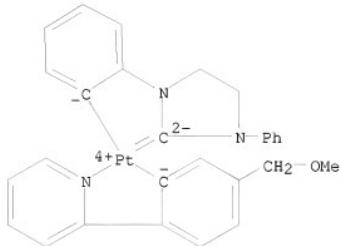
CN Platinato(1-), [5-(carboxylatomethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]-, hydrogen (9CI) (CA INDEX NAME)



● H^+

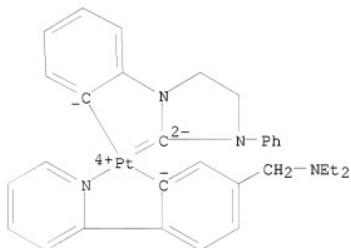
RN 895565-28-3 CAPLUS

CN Platinum, [5-(methoxymethyl)-2-(2-pyridinyl- κ N)phenyl- κ C][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



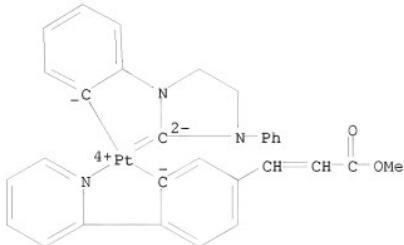
RN 895565-29-4 CAPLUS

CN Platinum, [5-[(diethylamino)methyl]-2-(2-pyridinyl- κ N)phenyl- κ C] [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 895565-30-7 CAPLUS

CN Platinum, [5-(3-methoxy-3-oxo-1-propenyl)-2-(2-pyridinyl- κ N)phenyl- κ C] [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 32 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:516024 CAPLUS
 DOCUMENT NUMBER: 145:28127
 TITLE: Preparation of transition metal N-heterocyclic carbene complexes for use in organic light-emitting diodes (OLEDs)
 INVENTOR(S): Egen, Martina; Kahle, Klaus; Bold, Markus; Gessner, Thomas; Lennartz, Christian; Nord, Simon; Schmidt, Hans-Werner; Thelakkat, Mukundan; Baete, Markus; Neuber, Christian; Kowalsky, Wolfgang; Schildknecht, Christian; Johannes, Hans-Hermann
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 96 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|----------------------|----------|
| WO 2006056418 | A2 | 20060601 | WO 2005-EP12529 | 20051123 |
| WO 2006056418 | A3 | 20070111 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| DE 102004057072 | A1 | 20060601 | DE 2004-102004057072 | 20041125 |
| EP 1819717 | A2 | 20070822 | EP 2005-811689 | 20051123 |

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
 BA, HR, MK, YU
 CN 101065389 A 20071031 CN 2005-80040471 20051123
 JP 2008521946 T 20080626 JP 2007-541832 20051123
 US 20080018221 A1 20080124 US 2007-720291 20070525
 KR 2007090953 A 20070906 KR 2007-714428 20070625
 PRIORITY APPLN. INFO.: DE 2004-102004057072A 20041125
 WO 2005-EP12529 W 20051123

OTHER SOURCE(S): MARPAT 145:28127

AB N-Heterocyclic transition metal carbene complexes having pending cyclometalated (hetero)aromatic moiety,
 $[LmKqM\{cyclo-C[N(Q-\kappa C2)CY1]\}X(Y3p)CY2]n$ [M = Group VIII, VIIB or
 VII metal, preferably M = Ir, Rh; Pt; cyclo-C[N(Q-\kappa C2)CY1]\}X(Y3p)CY2]
 = substituted cyclometalated N-heterocyclic carbene ligand, preferably
 substituted imidazolylidene; Q = optionally substituted (hetero)aromatic
 ring, preferably substituted ortho-metalated Ph, pyridinyl; X = N, O, S,
 preferably X = N; p = 1, 0; Y3 = H, alkyl; Y1, Y2 = H, alkyl, alkenyl
 alkynyl, (hetero)aryl, Y1-Y2 or Y2-Y3 = 5- or 6-membered (hetero)cycle; L
 = mono- or dianionic acidoligand, optionally bidentate; K = neutral mono-
 or bidentate ligand; n ≥ 1; n+m+q = oxidation number of the metal M],
 useful as components for light-emitting diodes (OLEDs), preferably as
 light-emitting components, were prepared by deprotonation and
 cyclometalation of the corresponding carbene precursors
 $[cyclo-HC[N(QH)CY1]\}X(Y3p)CY2]X1$ (X1 = counteranion, preferably X1 =
 BF4-, PF6-) and tested as emitting substances in model OLEDs. In an
 example, complex tris-[1-(4-cyano-1,2-phenylene-\kappa C2)-3-methyl-2-
 imidazolylidene]iridium (1) was prepared with 79.7% yield by methylation of
 56 g of 4-(1H-imidazol-1-yl)benzonitrile by 234.2 g of MeI in 560 mL of
 THF for 48 h followed by deprotonation and complexation with [Ir(cod)Cl]2
 in mol ratio 10:1. In another example, a mixture of 1 and
 1,3-phenylene-10,10'-bis(phenothiazin-5,5',5',5'-tetroxide) was used as
 light-emitting composition, yielding a emission with a maximum at 466 nm,

external

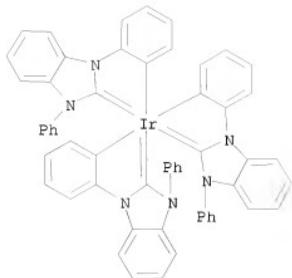
quantum yield of 7.3% and efficiency of 9.9 lm W-1.

IT 888725-36-8

RL: DEV (Device component use); PEP (Physical, engineering or chemical
 process); PYP (Physical process); PROC (Process); USES (Uses)
 (preparation of transition metal N-heterocyclic carbene cyclometalated
 complexes as electroluminescent components for organic light-emitting
 diodes)

RN 888725-36-8 CAPLUS

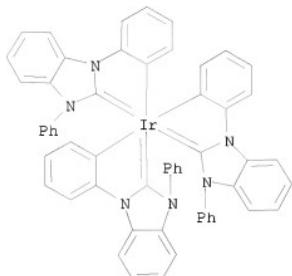
CN Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-
 (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 33 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:1202856 CAPLUS
 DOCUMENT NUMBER: 145:513425
 TITLE: Novel deep-blue emitting phosphorescent emitter
 AUTHOR(S): Schildknecht, C.; Ginev, G.; Kammoun, A.; Riedl, T.;
 Kowalsky, W.; Johannes, H.-H.; Lennartz, C.; Kahle,
 K.; Egen, M.; Gessner, T.; Bold, M.; Nord, S.; Erk, P.
 CORPORATE SOURCE: Institut fuer Hochfrequenztechnik, Technische Univ.
 Braunschweig, Braunschweig, D-38106, Germany
 SOURCE: Proceedings of SPIE-The International Society for
 Optical Engineering (2005), 5937(Organic
 Light-Emitting Materials and Devices IX),
 59370E/1-59370E/9
 CODEN: PSISDG; ISSN: 0277-786X
 PUBLISHER: SPIE-The International Society for Optical Engineering
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Currently, one of the most challenging applications for OLEDs is the full color display. The most energy-efficient way to realize light generation in OLEDs is by using phosphorescent emitters. Green and red emitters have already been demonstrated, but the search for blue emitting organic phosphorescent emitters with good color purity is still ongoing with arduous effort. Here we present our work with a new material developed at BASF which allows phosphorescent emission in the deep-blue spectral range. The emitter has an emission maximum at 400 nm, which gives CIE color coordinates of $x = 0.16$ and $y = 0.06$. An OLED device made with this new material shows a maximum external quantum efficiency of 1.5 %. The OLED was built in a three layer structure, with the emitting zone being a hybrid guest-host system. As host material we used the optically and electronically inert polymer poly-methyl-methacrylate (PMMA). Because of its lack of charge transport abilities we doped the host material with a high concentration of the triplet emitting material, i.e. the emitter itself is also used as charge transport material.
 IT 888725-36-8
 RL: DEV (Device component use); PEP (Physical, engineering or chemical

process); PRP (Properties); PYP (Physical process); PROC (Process); USES (Uses)
 (new material developed at BASF allowing phosphorescent emission in
 deep-blue spectral range)
 RN 888725-36-8 CAPLUS
 CN Iridium, tris[(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)-1,2-phenylene]-
 (9CI) (CA INDEX NAME)



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:182773 CAPLUS
 DOCUMENT NUMBER: 142:287586
 TITLE: Transition metal complexes comprising carbene ligands serving as emitters for organic light-emitting diodes (OLEDs)
 INVENTOR(S): Bold, Markus; Lennartz, Christian; Prinz, Martina; Schmidt, Hans-Werner; Thelakkat, Mukundan; Baete, Markus; Neuber, Christian; Kowalsky, Wolfgang; Schildknecht, Christian; Johannes, Hans-Hermann
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 79 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---|----------|-----------------|----------|
| WO 2005019373 | A2 | 20050303 | WO 2004-EP9269 | 20040818 |
| WO 2005019373 | A3 | 20050519 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, | | | |

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
 SN, TD, TG

| | | | | |
|--|----|----------|------------------|----------|
| DE 10338550 | A1 | 20050331 | DE 2003-10338550 | 20030819 |
| EP 1658349 | A2 | 20060524 | EP 2004-764255 | 20040818 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| CN 1871322 | A | 20061129 | CN 2004-80030649 | 20040818 |
| JP 2007533774 | T | 20071122 | JP 2006-523602 | 20040818 |
| KR 2007050859 | A | 20070516 | KR 2006-703352 | 20060217 |

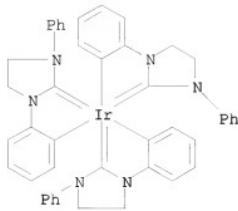
PRIORITY APPLN. INFO.:

| | | | | |
|----------------|---|---------------|---|----------|
| DE 10338550 | A | 2003-10338550 | A | 20030819 |
| WO 2004-EP9269 | | | W | 20040818 |

AB The use in organic light-emitting diodes (OLEDs) is described of transition metal complexes described by the general formula $(L)m(K)oM(\text{carbene})^n$ ($M = \text{Co, Rh, Ir, Nb, Pd, Pt, Fe, Ru, Os, Cr, Mo, W, Mn, Tc, Re, Cu, Ag, or Au}$; carbene = neutral or singly charged anionic mono- or bi- or tridentate carbene ligands, including bis or tris carbene ligands; L = monodentate or bidentate singly or doubly charged anionic ligands; K = neutral mono or bidentate ligands selected from phosphine, phosphates and their derivs., arsenates and their derivs., phosphates, CO, pyridines, nitriles, and conjugated dienes that can form π complexes with M ; $n \geq 1$, with the caveat that, when $n > 1$, the carbene ligands may be the same or different; and $m \geq 0$, with the caveat that, if $m > 1$, the L ligands may be the same or different; $o \geq 0$, with the caveat that, if $o > 1$, the K ligands may be the same or different). Light-emitting layers are described which comprise the carbene ligand-containing compds., and OLEDs are also described which employ the layers, along with devices incorporating the OLEDs. Selected transition metal complexes are also described. The use of the transition metal complexes to color bulk polymers is also described.

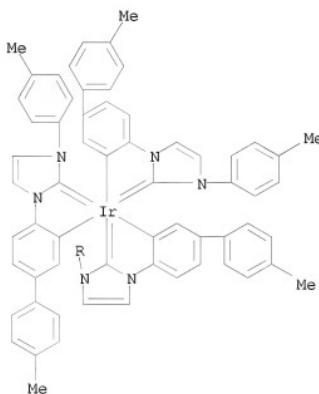
IT 847049-63-2P 847049-64-3P 847049-65-4P
 847049-66-5P 847063-08-5P 847063-11-0P
 RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (transition metal complexes comprising carbene ligands serving as emitters for organic light-emitting diodes and compds. and diodes and devices using them)

RN 847049-63-2 CAPLUS
 CN Iridium, tris[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI)
 (CA INDEX NAME)



RN 847049-64-3 CAPLUS
CN Iridium, tris[(4'-methyl[1,1'-biphenyl]-3,4-diyl)[3-(4-methylphenyl)-1H-imidazol-1-yl-2(3H)-ylidene]]- (9CI) (CA INDEX NAME)

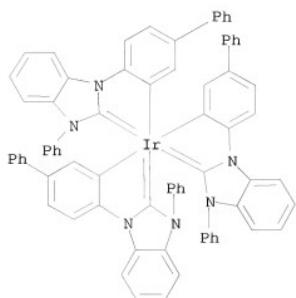
PAGE 1-A



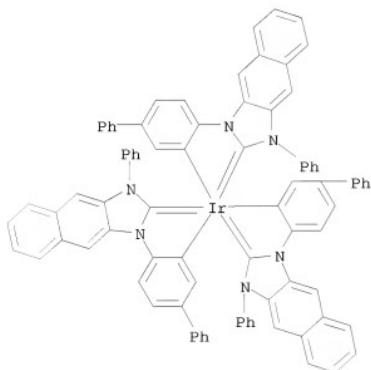
PAGE 2-A



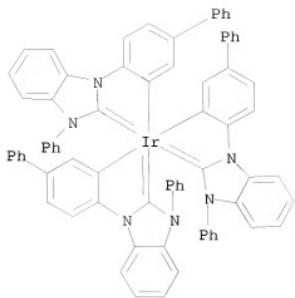
RN 847049-65-4 CAPLUS
CN Iridium, tris[1,1'-biphenyl]-3,4-diyl(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)]-, (OC-6-22)- (9CI) (CA INDEX NAME)



RN 847049-66-5 CAPLUS
CN Iridium, tris([1,1'-biphenyl]-3,4-diyl(3-phenyl-1H-naphth[2,3-d]imidazol-1-yl-2(3H)-ylidene)]-) (9CI) (CA INDEX NAME)

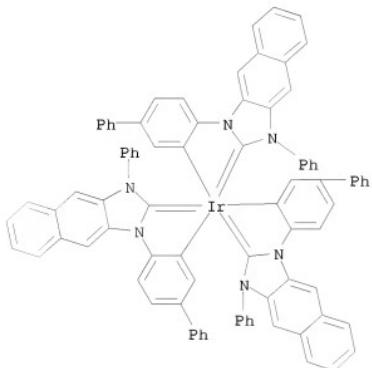


RN 847063-08-5 CAPLUS
CN Iridium, tris[1,1'-biphenyl]-3,4-diyl(3-phenyl-1H-benzimidazol-1-yl-2(3H)-ylidene)]-, (OC-6-21)- (9CI) (CA INDEX NAME)



RN 847063-11-0 CAPLUS

CN Iridium, tris[1,1'-biphenyl]-3,4-diyl(3-phenyl-1H-naphth[2,3-d]imidazol-1-yl-2(3H)-ylidene)]-, (OC-6-22)- (9CI) (CA INDEX NAME)



L4 ANSWER 35 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:403058 CAPLUS

DOCUMENT NUMBER: 140:406957

TITLE: Preparation of N-heterocyclic carbene complexes as catalysts for hydrogenation and hydrosilylation

INVENTOR(S): Dioumaev, Vladimir K.; Bullock, R. Morris

PATENT ASSIGNEE(S): Brookhaven Science Associates, LLC, USA

SOURCE: U.S., 14 pp.

CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| US 6737531 | B1 | 20040518 | US 2002-320954 | 20021217 |
| US 20050075504 | A1 | 20050407 | US 2003-731378 | 20031209 |
| US 7005525 | B2 | 20060228 | | |

PRIORITY APPLN. INFO.: US 2002-320954 A2 20021217

OTHER SOURCE(S): CASREACT 140:406957; MARPAT 140:406957

AB The preparation of organometallic complex, [CpM(CO)2(NHC)Lk]+A- (M = Mo, W; Cp = (un)substituted cyclopentadienyl radical represented by [CSQ1Q2Q3Q4Q5], Q1-Q5 = independently selected from the group consisting of H, Cl-20 hydrocarbyl, substituted hydrocarbyl, halo, halo-substituted hydrocarbyl, -OR, -C(O)R', -CO2R', -SiR'3, and -NR'R'', wherein R', R'' = independently selected from the group consisting of H, Cl-20 hydrocarbyl, halo, and halo-substituted hydrocarbyl, wherein Q1-Q5 radicals are optionally linked to each other to form a stable bridging group; NHC = N-heterocyclic carbene; L = neutral electron donor ligand; k = 0-1, or L is an anionic ligand wherein k is 2, and A- is an anion) is described. Thus, reaction of CpW(CO)2(PMe3)H with 1,3-bis(2,4,6-trimethylphenyl)imidazol-2-ylidene (IMes) in PhMe gave 76% CpW(CO)2(IMes)H which on treatment with Ph3C+B(C6F5)4- in PhMe gave 91% title catalyst, [CpW(CO)2(IMes)]+[B(C6F5)4]-. Processes using the organometallic complex as catalyst for hydrogenation of aldehydes and ketones are provided. Processes using the organometallic complex as catalyst for the hydrosilylation of aldehydes, ketones and esters are also provided.

IT 688785-27-5P

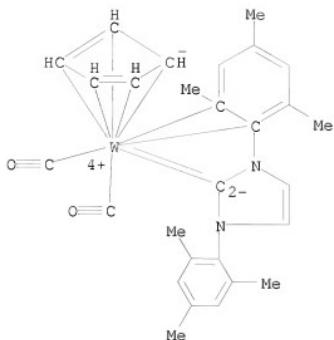
RL: CAT (Catalyst use); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of nitrogen heterocyclic carbene molybdenum and tungsten complexes as catalysts for hydrogenation and hydrosilylation)

RN 688785-27-5 CAPLUS

CN Tungsten(1+), dicarbonyl(η 5-2,4-cyclopentadien-1-yl) $\{$ η 3-1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene $\}$ -, stereoisomer, tetrakis(pentafluorophenyl)borate(1-) (9CI) (CA INDEX NAME)

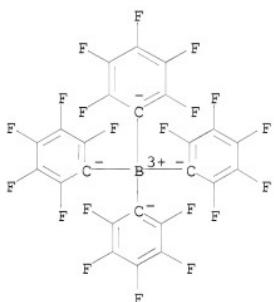
CM 1

CRN 646512-81-4
 CMF C28 H29 N2 O2 W
 CCI CCS



CM 2

CRN 47855-94-7
CMF C24 B F20
CCI CCS

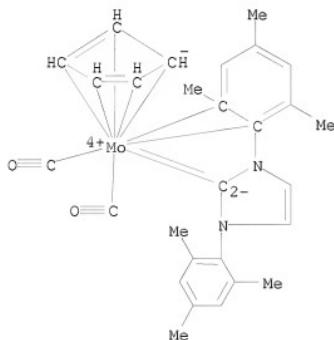


IT 688785-26-4P 688785-29-7P
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
USES (Uses)
(preparation of nitrogen heterocyclic carbene molybdenum and tungsten
complexes as catalysts for hydrogenation and hydrosilylation)
RN 688785-26-4 CAPLUS
CN Molybdenum(1+), dicarbonyl(η^5 -2,4-cyclopentadien-1-yl)[η^3 -1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene]-,

stereoisomer, tetrakis(pentafluorophenyl)borate(1-) (9CI) (CA INDEX NAME)

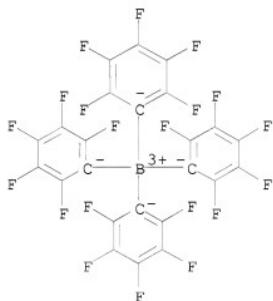
CM 1

CRN 646512-79-0
CMF C28 H29 Mo N2 O2
CCI CCS



CM 2

CRN 47855-94-7
CMF C24 B F20
CCI CCS



RN 688785-29-7 CAPLUS

CN Tungsten(1+), dicarbonyl(η^5 -2,4-cyclopentadien-1-yl) [η^3 -1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene](tetrahydro-d4-furan-d4)-, stereoisomer, tetrakis(pentafluorophenyl)borate(1-) (9CI) (CA INDEX NAME)

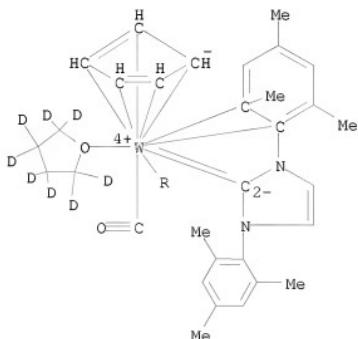
CM 1

CRN 646512-85-8

CMF C32 H29 D8 N2 O3 W

CCI CCS

PAGE 1-A



PAGE 2-A

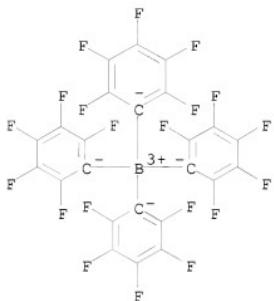


CM 2

CRN 47855-94-7

CMF C24 H F20

CCI CCS



IT 688785-28-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of nitrogen heterocyclic carbene molybdenum and tungsten complexes as catalysts for hydrogenation and hydrosilylation)

RN 688785-28-6 CAPLUS

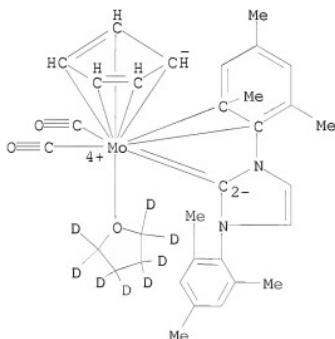
CN Molybdenum(1+), dicarbonyl(η^5 -2,4-cyclopentadien-1-yl)[η^3 -1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene](tetrahydro-4-furan-4-yl)-, stereoisomer, tetrakis(pentafluorophenyl)borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 646512-83-6

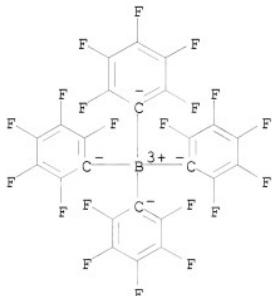
CMF C32 H29 D8 Mo N2 O3

CCI CCS



CM 2

CRN 47855-94-7
 CMF C24 B F20
 CCI CCS



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 36 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2003:496788 CAPLUS
 DOCUMENT NUMBER: 140:111479
 TITLE: An N-heterocyclic carbene as a bidentate hemilabile ligand: a synchrotron X-ray diffraction and density functional theory study
 AUTHOR(S): Dioumaev, Vladimir K.; Szalda, David J.; Hanson, Jonathan; Franz, James A.; Bullock, R. Morris
 CORPORATE SOURCE: Chemistry Department, Brookhaven National Laboratory, Upton, NY, 11973-5000, USA
 SOURCE: Chemical Communications (Cambridge, United Kingdom) (2003), (14), 1670-1671
 CODEN: CHCOFS; ISSN: 1359-7345
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 140:111479
 AB The N-heterocyclic carbene ligand IMes (IMes = 1,3-bis(2,4,6-trimethylphenyl)imidazol-2-ylidene) was shown by synchrotron crystallog. and DFT computations to adopt a hemilabile bidentate coordination mode in CpM(CO)₂(IMes)+B(C₆F₅)₄ (M = Mo (1), W(2)), with a C:C bond of one mesityl weakly coordinated to the metal. Both 1 and 2 exhibit modest catalytic activity for the hydrogenation of ethanone.
 IT 688785-26-4P
 RL: CAT (Catalyst use); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(W-arene η^2 hapticity; synthesis, bonding and DFT study of 16e-complexes of Mo and W having bidentate hemilabile ligands)

RN 688785-26-4 CAPLUS

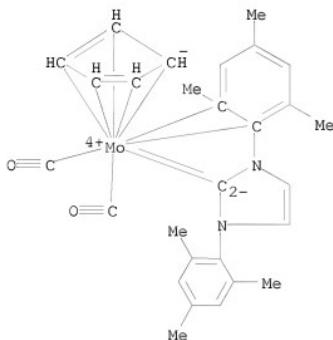
CN Molybdenum(1+), dicarbonyl(η^5 -2,4-cyclopentadien-1-yl)[η^3 -1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene]-, stereoisomer, tetrakis(pentafluorophenyl)borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 646512-79-0

CMF C28 H29 Mo N2 O2

CCI CCS

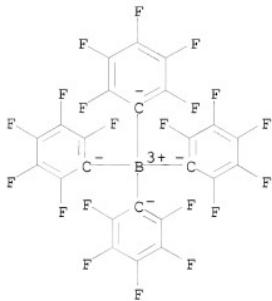


CM 2

CRN 47855-94-7

CMF C24 B F20

CCI CCS



IT 688785-27-5P

RL: CAT (Catalyst use); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (crystal structure, W-arene η^2 -hapticity; synthesis, bonding and DFT study of 16e⁻ complexes of Mo and W having bidentate hemilabile ligands)

RN 688785-27-5 CAPLUS

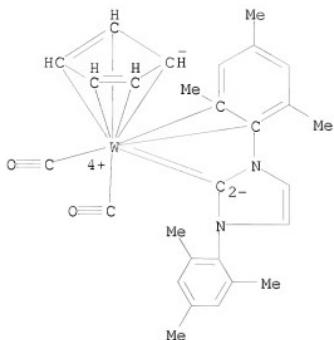
CN Tungsten(1+), dicarbonyl(η^5 -2,4-cyclopentadien-1-yl){ η^3 -1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene)}, stereoisomer, tetrakis(pentafluorophenyl)borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 646512-81-4

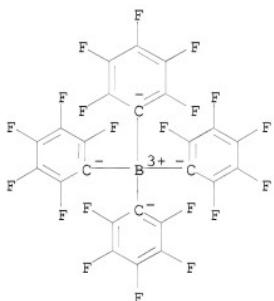
CMF C28 H29 N2 O2 W

CCI CCS



CM 2

CRN 47855-94-7
CME C24 B F20
CCI CCS

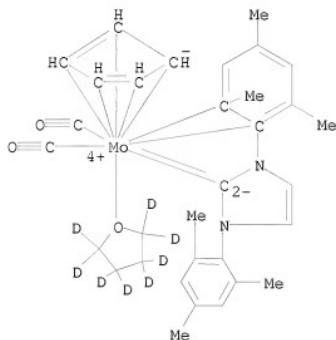


- IT 688785-28-6P 688785-29-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis, bonding and DFT study of 16e- complexes of Mo and W having
bidentate hemilabile ligands)
- RN 688785-28-6 CAPLOS
CN Molybdenum(1+), dicarbonyl(η^5 -2,4-cyclopentadienyl)[η^3 -1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene](tetrahydro-d4-furan-d4)-, stereoisomer, tetrakis(pentafluorophenyl)borate(1-) (9CI)

(CA INDEX NAME)

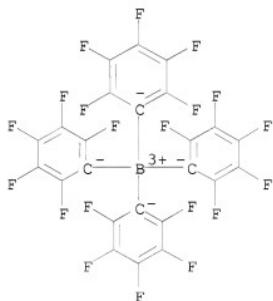
CM 1

CRN 646512-83-6
CMF C32 H29 D8 Mo N2 O3
CCI CCS



CM 2

CRN 47855-94-7
CMF C24 B F20
CCI CCS



RN 688785-29-7 CAPLUS

CN Tungsten(1+), dicarbonyl(η^5 -2,4-cyclopentadien-1-yl) [η^3 -1,3-dihydro-1,3-bis(2,4,6-trimethylphenyl)-2H-imidazol-2-ylidene](tetrahydro-d4-furan-d4)-, stereoisomer, tetrakis(pentafluorophenyl)borate(1-) (9CI) (CA INDEX NAME)

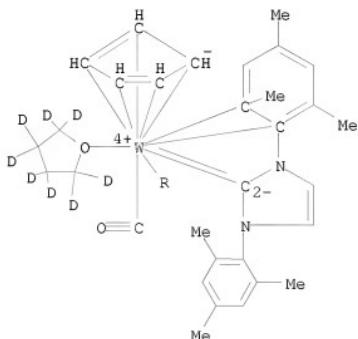
CM 1

CRN 646512-85-8

CMF C32 H29 D8 N2 O3 W

CCI CCS

PAGE 1-A



PAGE 2-A

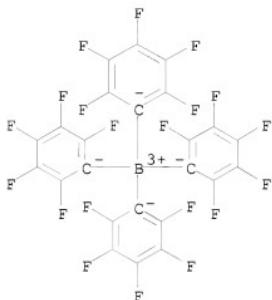


CM 2

CRN 47855-94-7

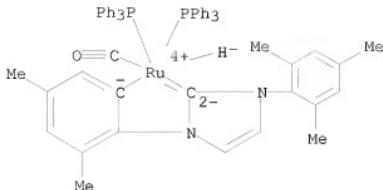
CMF C24 H20 F20

CCI CCS



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 37 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2002:272293 CAPLUS
 DOCUMENT NUMBER: 137:20464
 TITLE: C-C and C-H Bond Activation Reactions in N-Heterocyclic Carbene Complexes of Ruthenium
 Jazzaar, Rodolphe F. R.; Macgregor, Stuart A.; Mahon, Mary F.; Richards, Stephen P.; Whittlesey, Michael K.
 Department of Chemistry, University of Bath, Bath, BA2 7AY, UK
 AUTHOR(S):
 CORPORATE SOURCE:
 SOURCE: Journal of the American Chemical Society (2002), 124(18), 4944-4945
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 137:20464
 AB Thermolysis of Ru(PPh₃)₃(CO)H₂ with the N-heterocyclic carbene bis(1,3-(2,4,6-trimethylphenyl)imidazol-2-ylidene) (IMes) results in C-C activation of an Ar-CH₃ bond in one of the mesityl rings of the carbene ligand. Upon addition of IMes to Ru(PPh₃)₃(CO)H₂ at room temperature in the presence of an alkene, C-H bond activation is observed instead. The thermodn. of these C-C and C-H cleavage reactions have been probed using d. functional theory.
 IT 434318-96-4P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and crystal structure of)
 RN 434318-96-4 CAPLUS
 CN Ruthenium, carbonyl[(3,5-dimethyl-1,2-phenylene)[3-(2,4,6-trimethylphenyl)-1H-imidazol-1-yl-2(3H)-ylidene]]hydrobis(triphenylphosphine)-, (OC-6-14)-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 38 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:169514 CAPLUS

DOCUMENT NUMBER: 112:169514

ORIGINAL REFERENCE NO.: 112:28431a, 28434a

TITLE: Crystal and molecular structure of the ruthenium-carbene-tetrahydroborate complex [Ru(BH₄) (LAr)(PPh₃)₂]; (LAr = CN(C₆H₄Me-4)CH₂CH₂NC₆H₃Me-4)

AUTHOR(S): Thomas, S. A.

CORPORATE SOURCE: Dep. Chem., Ahmadu Bello Univ., Zaria, Nigeria

SOURCE: Journal of Crystallographic and Spectroscopic Research (1989), 19(6), 1017-31

CODEN: JCREDB; ISSN: 0277-8068

DOCUMENT TYPE: Journal

LANGUAGE: English

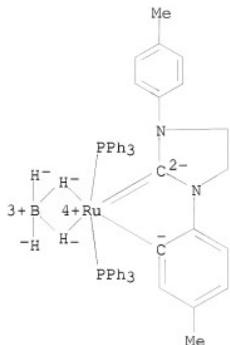
AB The title compound is monoclinic, space group P21/c, with a 15.940(1), b 23.357(2), c 18.767(2) Å, and β 132.62(1)°; dc = 1.150 for Z = 4. The final R = 0.074 and R_w = 0.085 for 1848 reflections. Atomic coordinates are given. The BH₄- ligand in the complex is bidentate. The lengths of the Ru-carbene C bond and other bonds to the Ru are determined by a combination of several factors, and not just by a purely σ- or π-bonding interaction.

IT 126155-76-8

RL: PRP (Properties)
(crystal structure of)

RN 126155-76-8 CAPLUS

CN Ruthenium, [(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]] [tetrahydroborato(1-H, H')bis(triphenylphosphine)-, (OC-6-14)-(9CI) (CA INDEX NAME)



L4 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1983:89623 CAPLUS

DOCUMENT NUMBER: 98:89623

ORIGINAL REFERENCE NO.: 98:13690h,13691a

TITLE: Homoleptic tris(organochelate)iridium(III) complexes by spontaneous ortho-metatalation of electron-rich olefin-derived N,N'-diarylcarbene ligands and the x-ray structures of tris(ortho-metatalated-carbene)iridium(III) complexes

AUTHOR(S): Hitchcock, Peter B.; Lappert, Michael F.; Terreros, Pilar

CORPORATE SOURCE: Sch. Chem. Mol. Sci., Univ. Sussex, Brighton, BN1 9QJ, UK

SOURCE: Journal of Organometallic Chemistry (1982), 239(2), C26-C30

DOCUMENT TYPE: CODEN: JORCAI; ISSN: 0022-328X

LANGUAGE: Journal

GI English

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Treating [{Ir(COD)(μ -Cl)}] with excess of the electron-rich olefin I ($R = C_6H_4Me-p, C_6H_4OMe-p$) affords the ortho-metatalated tricyclic II ($R_1 = Me, OMe$). II ($R_1 = Me$) with HCl yields III; x-ray data show that in III there is an unexpectedly close Ir...C(σ -aryl) contact involving the free ligand.

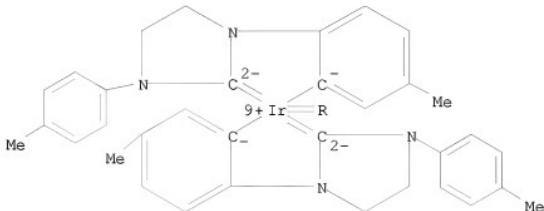
IT 84667-30-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and structure of)

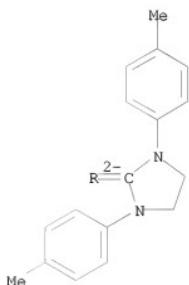
RN 84667-30-1 CAPLUS

CN Iridium(1+), [1,3-bis(4-methylphenyl)-2-imidazolidinylidene]bis[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]]-, chloride, (SP-5-33)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



● Cl⁻

IT 84667-32-3P 84668-52-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

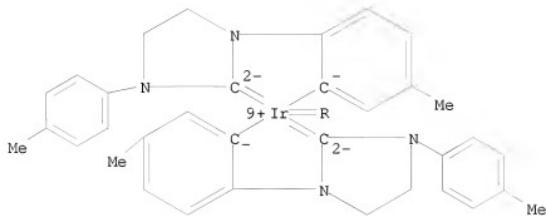
RN 84667-32-3 CAPLUS

CN Iridium(1+), [1,3-bis(4-methylphenyl)-2-imidazolidinylidene]bis[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]]-, (SP-5-33)-, tetraphenylborate(1-) (9CI) (CA INDEX NAME)

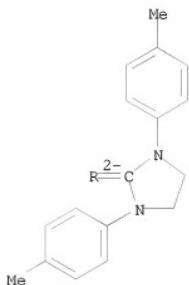
CM 1

CRN 84667-31-2
CMF C51 H52 Ir N6
CCI CCS

PAGE 1-A

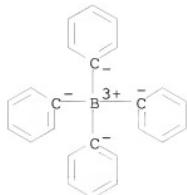


PAGE 2-A



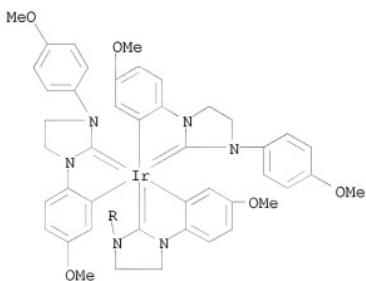
CM 2

CRN 4358-26-3
CMF C24 H20 B
CCI CCS

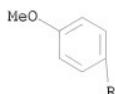


RN 84668-52-0 CAPLUS
CN Iridium, tris[(5-methoxy-1,2-phenylene)[3-(4-methoxyphenyl)-1-imidazolidinyl-2-ylidene]]-, (OC-6-22)- (9CI) (CA INDEX NAME)

PAGE 1-A

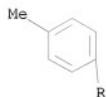
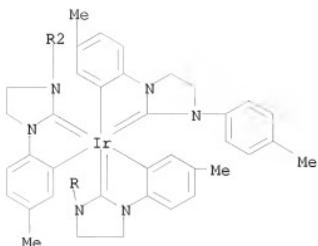


PAGE 2-A

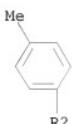


IT 84668-51-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, crystal structure, and protonation of)
RN 84668-51-9 CAPLUS
CN Iridium, tris[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]]-, (OC-6-22)- (9CI) (CA INDEX NAME)

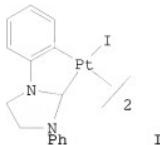
PAGE 1-A



PAGE 2-A



L4 ANSWER 40 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1981:604131 CAPLUS
 DOCUMENT NUMBER: 95:204131
 ORIGINAL REFERENCE NO.: 95:34117a,34120a
 TITLE: Preparation and characterization of new cycloplatinated carbene complexes
 AUTHOR(S): Hiraki, Katsuma; Onishi, Masayoshi; Ohnuma, Kohji;
 Sugino, Keiichi
 CORPORATE SOURCE: Fac. Eng., Nagasaki Univ., Nagasaki, 852, Japan
 SOURCE: Journal of Organometallic Chemistry (1981), 216(3),
 413-19
 DOCUMENT TYPE: CODEN: JORCAI; ISSN: 0022-328X
 LANGUAGE: English
 GI



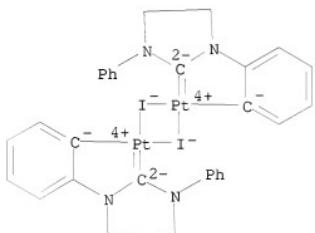
AB Reaction of $(\text{PtIMe}_3)_4$ with bis(1,3-diphenyl-2-imidazolidinylidene) [(Hdpim)₂] gave a new dinuclear carbene complex, $\{(\text{Pt}(\text{dpim})\text{I})_2\}$ (I) in 84% yields, which contains a cycloplatinated carbene structure. Some mononuclear derivs., $[\text{Pt}(\text{dpim})(\text{acac})]$ (acac = acetylacetoneato), $[\text{Pt}(\text{dpim})\{\text{P}(\text{OCHMe}_2)_3\}]$, $[\text{Pt}(\text{dpim})(\text{NCMe}_2)_2]\text{ClO}_4$, and $[\text{Pt}(\text{dpim})(\text{COD})]\text{ClO}_4$ ($\text{COD} = 1,5\text{-cyclooctadiene}$) were prepared from I. An intermediate species, $\{[\text{PtMeI}(\text{Hdpim})_2]\}$, leading to I is discussed.

IT 79670-64-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reactions of)

RN 79670-64-7 CAPLUS

CN Platinum, di- μ -iodobis[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]di- (9CI) (CA INDEX NAME)

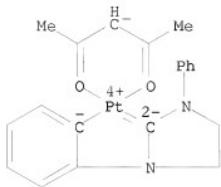


IT 79670-65-8P 79670-66-9P 79670-68-1P
79766-83-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

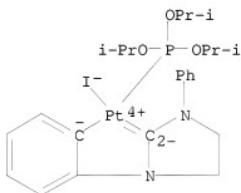
RN 79670-65-8 CAPLUS

CN Platinum, (2,4-pentanedionato-O,O') [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]-, (SP-4-3)- (9CI) (CA INDEX NAME)



RN 79670-66-9 CAPLUS

CN Platinum, iodo[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][tris(1-methylethyl) phosphite-P]- (9CI) (CA INDEX NAME)



RN 79670-68-1 CAPLUS

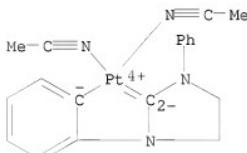
CN Platinum(1+), bis(acetonitrile)[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]-, (SP-4-3)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 79670-67-0

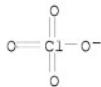
CMF C19 H19 N4 Pt

CCI CCS



CM 2

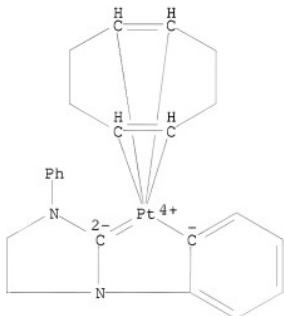
CRN 14797-73-0
CMF Cl O4



RN 79766-83-9 CAPLUS
CN Platinum(1+), [(1,2,5,6-η)-1,5-cyclooctadiene][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]-, perchlorate (9CI) (CA INDEX NAME)

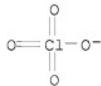
CM 1

CRN 79766-82-8
CMF C23 H25 N2 Pt
CCI CCS

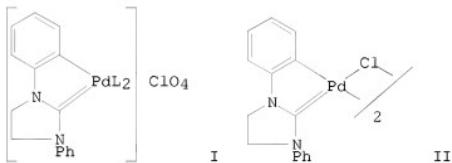


CM 2

CRN 14797-73-0
CMF Cl O4



L4 ANSWER 41 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1981:65820 CAPLUS
 DOCUMENT NUMBER: 94:65820
 ORIGINAL REFERENCE NO.: 94:10741a,10744a
 TITLE: Cationic (carbene)organopalladium(II) complexes
 coordinated with cyclic diolefin or organic nitrile
 AUTHOR(S): Hiraki, Katsuma; Sugino, Keiichi
 CORPORATE SOURCE: Dep. Ind. Chem., Fac. Eng., Nagasaki, 852, Japan
 SOURCE: Journal of Organometallic Chemistry (1980), 201(2),
 469-75
 CODEN: JORCAI; ISSN: 0022-328X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI

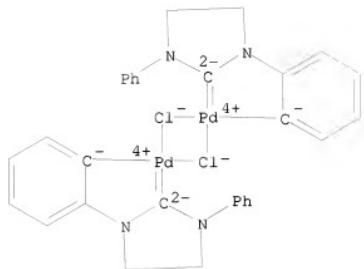


AB The title compds. I (L_2 = norbornadiene, 1,5-cyclooctadiene, dicyclopentadiene; L = $CH_2:CHCN$, MeCN, p-MeC₆H₄CN) were prepared in 22-59% yields by treating II with $AgClO_4$ and L_2 or L .

IT 70882-99-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with olefins and with nitriles)

RN 70882-99-4 CAPLUS

CN Palladium, di- μ -chlorobis[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]di- (9CI) (CA INDEX NAME)



IT 76375-36-5P 76375-38-7P 76375-40-1P
76375-42-3P 76375-44-5P 76428-98-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 76375-36-5 CAPLUS

CN Palladium(1+), [(2,3,5,6- η)-bicyclo[2.2.1]hepta-2,5-diene]{1,2-phenylene(3-phenyl-1-imidazolinyl-2-ylidene)}-, perchlorate (9CI) (CA INDEX NAME)

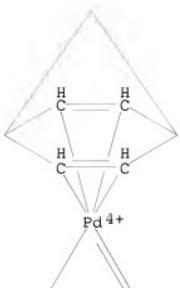
CM 1

CRN 76375-35-4

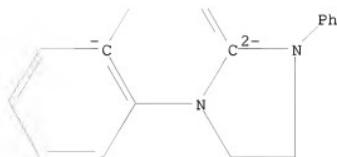
CMF C22 H21 N2 Pd

CCI CCS

PAGE 1-A

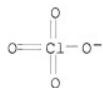


PAGE 2-A



CM 2

CRN 14797-73-0
CME Cl O4



RN 76375-38-7 CAPLUS

10568344b.trn

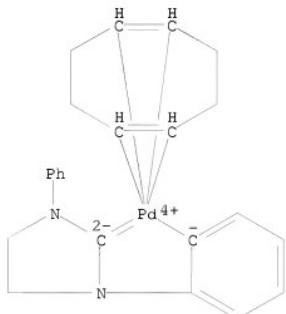
CN Palladium(1+), [(1,2,5,6-η)-1,5-cyclooctadiene][1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 76375-37-6

CMF C23 H25 N2 Pd

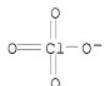
CCI CCS



CM 2

CRN 14797-73-0

CMF C1 O4



RN 76375-40-1 CAPLUS

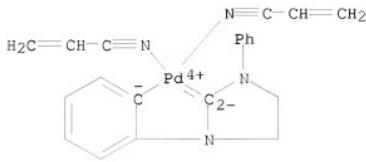
CN Palladium(1+), [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis(2-propenenitrile)-, (SP-4-3)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 76375-39-8

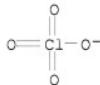
CMF C21 H19 N4 Pd

CCI CCS



CM 2

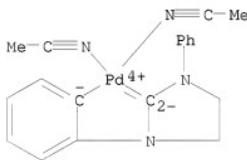
CRN 14797-73-0
CMF C1 O4



RN 76375-42-3 CAPLUS
CN Palladium(1+), bis(acetonitrile){1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}-, (SP-4-3)-, perchlorate (9CI) (CA INDEX NAME)

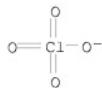
CM 1

CRN 76375-41-2
CMF C19 H19 N4 Pd
CCI CCS



CM 2

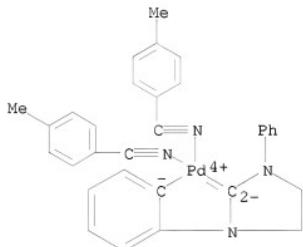
CRN 14797-73-0
CMF C1 O4



RN 76375-44-5 CAPLUS
CN Palladium(1+), bis(4-methylbenzonitrile)[1,2-phenylenebis(3-phenyl-1-imidazolidinyl-2-ylidene)]-, (SP-4-3)-, perchlorate (9CI) (CA INDEX NAME)

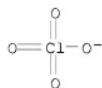
CM 1

CRN 76375-43-4
CMF C31 H27 N4 Pd
CCI CCS



CM 2

CRN 14797-73-0
CMF Cl O4

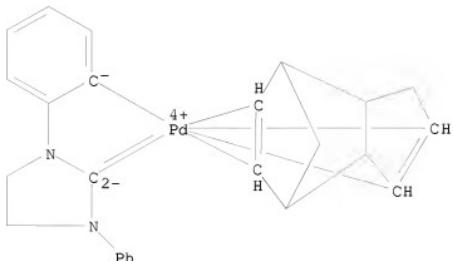


RN 76428-98-3 CAPLUS
CN Palladium(1+), [1,2-phenylenebis(3-phenyl-1-imidazolidinyl-2-ylidene)]{(2,3,5,6-η)-3a,4,7,7a-tetrahydro-4,7-methano-1H-indene}-, perchlorate (9CI) (CA INDEX NAME)

CM 1

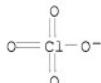
CRN 76428-97-2

CMF C25 H25 N2 Pd
CCI CCS



CM 2

CRN 14797-73-0
CMF Cl O4



L4 ANSWER 42 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1980:620917 CAPLUS

DOCUMENT NUMBER: 93:220917

ORIGINAL REFERENCE NO.: 93:35279a,35282a

TITLE: Reactions of halo-bridged organopalladium(II) complexes with an electron-rich olefin. New cyclopalladated carbene complexes and (carbene)chloropalladium(II) complexes containing a σ,π -methallyl group of a π -coordinated-chelating alkyl-palladium σ -bond

AUTHOR(S): Hiraki, Katsuma; Sugino, Keiichi; Onishi, Masayoshi
CORPORATE SOURCE: Fac. Eng., Nagasaki Univ., Nagasaki, 852, Japan
SOURCE: Bulletin of the Chemical Society of Japan (1980),
53(7), 1976-81

DOCUMENT TYPE: CODEN: BCSJA8; ISSN: 0009-2673
LANGUAGE: Journal
GI English

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Pd(II) complex (I) reacted with the electron-rich olefin bis(1,3-diphenyl-2-imidazolidinylidene) (L2) to give the new dinuclear carbene complex (II). Treating I with Tl acetylacetonate, (Me₂CHO)₃P, 4-picoline, AgOAc and L2 gave new carbene complexes (e.g., III). Reaction of IV and V with L2 gave carbene complexes VI and VII, resp.

IT 70882-99-4P 70883-00-0P 70883-01-1P

70883-02-2P 70883-03-3P 70883-04-4P

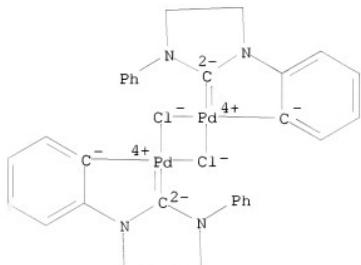
75551-63-2P 75551-65-4P 75551-66-5P

75559-72-7P 75598-36-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

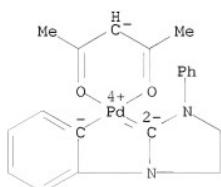
RN 70882-99-4 CAPLUS

CN Palladium, di- μ -chlorobis[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]di- (9CI) (CA INDEX NAME)



RN 70883-00-0 CAPLUS

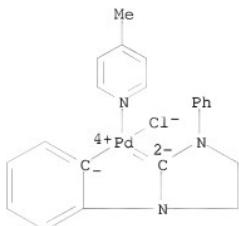
CN Palladium, (2,4-pantanedionato-O,O') [1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]-, (SP-4-3)- (9CI) (CA INDEX NAME)



RN 70883-01-1 CAPLUS

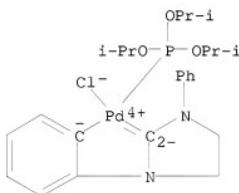
CN Palladium, chloro(4-methylpyridine)[1,2-phenylene(3-phenyl-1-

imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



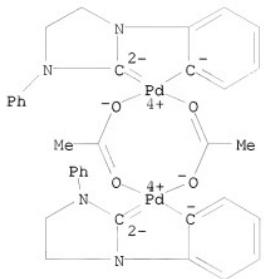
RN 70883-02-2 CAPLUS

CN Palladium, chloro[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][tris(1-methylethyl) phosphite-P], (SP-4-4)- (9CI) (CA INDEX NAME)



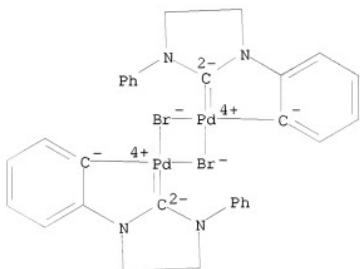
RN 70883-03-3 CAPLUS

CN Palladium, bis[\mu-acetato-O:O']bis[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]di- (9CI) (CA INDEX NAME)



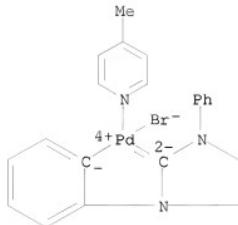
RN 70883-04-4 CAPLUS

CN Palladium, di- μ -bromobis[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]di- (9CI) (CA INDEX NAME)



RN 75551-63-2 CAPLUS

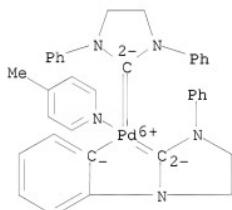
CN Palladium, bromo(4-methylpyridine)[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 75551-65-4 CAPLUS
CN Palladium(1+), (1,3-diphenyl-2-imidazolidinylidene)(4-methylpyridine)[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]-, (SP-4-2)-, perchlorate (9CI) (CA INDEX NAME)

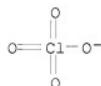
CM 1

CRN 75551-64-3
CMF C36 H34 N5 Pd
CCI CCS



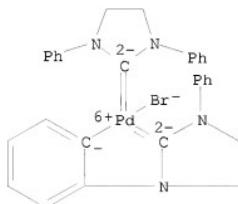
CM 2

CRN 14797-73-0
CMF Cl O4



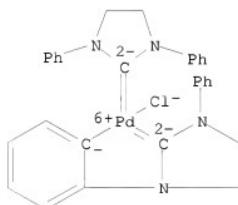
RN 75551-66-5 CAPLUS

CN Palladium, bromo(1,3-diphenyl-2-imidazolidinylidene){1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}-, (SP-4-4)- (9CI) (CA INDEX NAME)



RN 75559-72-7 CAPLUS

CN Palladium, chloro(1,3-diphenyl-2-imidazolidinylidene){1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}-, (SP-4-4)- (9CI) (CA INDEX NAME)



RN 75598-36-6 CAPLUS

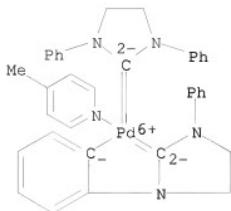
CN Palladium(1+), (1,3-diphenyl-2-imidazolidinylidene)(4-ethylpyridine){1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)}-, (SP-4-4)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 75598-35-5

CMF C36 H34 N5 Pd

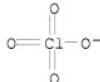
CCI CCS



CM 2

CRN 14797-73-0

CMF C1 O4



L4 ANSWER 43 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1980:146879 CAPLUS

DOCUMENT NUMBER: 92:146879

ORIGINAL REFERENCE NO.: 92:23877a,23880a

TITLE: Carbene complexes. 16. Synthesis of
NN'N''N'''-tetraaryl-substituted electron-rich
olefin-derived carbeneruthenium(II) complexes
containing an ortho-metatalated-N-arylcarbene ligand;
crystal structures of RuClR(Pt3)2 and
Ru(CO)ClR(Pt3)2 (R =

1,3-bis(4-tolyl)imidazolidin-2-ylidene-C2C2')

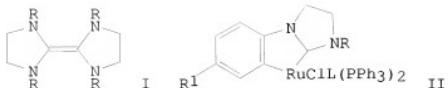
Hitchcock, Peter B.; Lappert, Michael F.; Pye, Peter
L.; Thomas, Sunday

AUTHOR(S): Sch. Mol. Sci., Univ. Sussex, Brighton, BN1 9QJ, UK
CORPORATE SOURCE: Journal of the Chemical Society, Dalton Transactions:
SOURCE: Inorganic Chemistry (1972-1999) (1979), (12), 1929-42

DOCUMENT TYPE: CODEN: JCDTBI; ISSN: 0300-9246

LANGUAGE: Journal

GI English

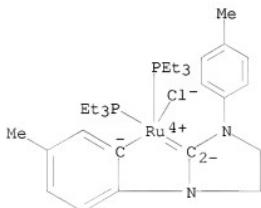


AB $\text{RuC12}(\text{PPh}_3)_3$ reacts thermally with the electron-rich olefins I [$\text{R} = \text{Ph}$, $\text{C}_6\text{H}_4\text{Me}-4$ (II), $\text{C}_6\text{H}_4\text{OMe}-4$ or -2], with elimination of PPh_3 and HCl , to form 5-coordinated III containing an α -metalated N -arylcarbene ligand L ($\text{R1} = \text{H}$, Me , OMe). The reaction of II with $\text{RuCl}(\text{NO})(\text{PPh}_3)_2$ also gives the appropriate $\text{RuClL}(\text{PPh}_3)_2$. Complexes III readily undergo phosphine substitution reactions with PR₃ [$\text{R23} = \text{Et}_3$, Bu_3 , Bu_2Ph , Et_2Ph , Me_2Ph , but not tricyclohexyl]. The reaction of III ($\text{R} = \text{C}_6\text{H}_4\text{Me}-4$, $\text{R1} = \text{Me}$) with I ($\text{R} = \text{Et}$) (IV) gives the bis(carbene) complex $\text{RuClL(L1)}(\text{PPh}_3)$ ($\text{L1} =$ nonmetalated carbene ligand derived from IV). Small ligands [e.g., CO , PF_3 , $\text{P}(\text{OMe})_3$ or NCMe] generally add to form 6-coordinate complexes of variable thermal stability. The reaction of $\text{RuCl}_3(\text{NO})(\text{PPh}_3)_2$ with II also gives an α -metalated complex, $\text{RuCl}_2(\text{NO})\text{PPh}_3$. This complex does not undergo substitution by PR₃ but with IV, NOCl is lost to give $\text{RuCl}(\text{L1})(\text{PPh}_3)$. The IR and ^1H , ^{13}C and ^{31}P NMR spectra of the complexes were studied. The 5- and 6-coordinate complexes are stereochem. rigid in solution. The crystal and mol. structures of the title complexes were determined by x-ray diffraction and refined to $R = 0.054$ and 0.045 , resp., for 3035 and 3142 reflections, resp. In the overall pseudooctahedral geometry about Ru, the 2 complexes differ only in the replacement of a weak Ru...HC contact (2.23 \AA) in the former for a CO ligand in the latter.

IT 64055-31-8P 72904-25-7P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and crystal and mol. structure of)

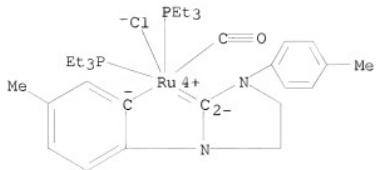
RN 64055-31-8 CAPLUS

CN Ruthenium, chloro[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]bis(triethylphosphine)-, (SP-4-3)- (9CI) (CA INDEX NAME)



RN 72904-25-7 CAPLUS

CN Ruthenium, carbonylchloro[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]bis(triethylphosphine)-, (OC-6-42)- (9CI) (CA INDEX NAME)

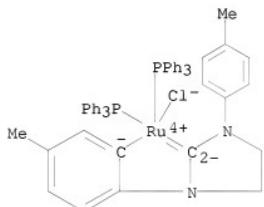


IT 64055-27-2P 64055-28-3P 72871-21-7P
 72871-22-8P 72871-23-9P 72871-24-0P
 72871-25-1P 72871-26-2P 72871-27-3P
 72871-28-4P 72871-29-5P 72871-30-8P
 72871-31-9P 72871-32-0P 72882-43-0P
 72882-44-1P 72882-45-2P 72882-46-3P
 72904-24-6P 73016-72-5P 73016-73-6P
 73016-74-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

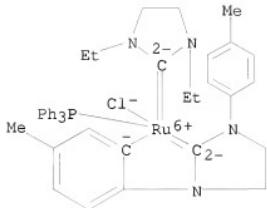
RN 64055-27-2 CAPLUS

CN Ruthenium, chloro[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]]bis(triphenylphosphine)-, (SP-5-43)- (9CI) (CA INDEX NAME)

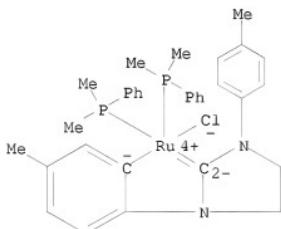


RN 64055-28-3 CAPLUS

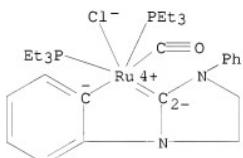
CN Ruthenium, chloro(1,3-diethyl-2-imidazolidinylidene)[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]](triphenylphosphine)- (9CI) (CA INDEX NAME)



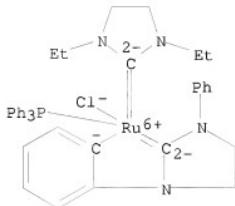
RN 72871-21-7 CAPLUS
 CN Ruthenium, chlorobis(dimethylphenylphosphine)[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]]-, (SP-5-43)- (9CI) (CA INDEX NAME)



RN 72871-22-8 CAPLUS
 CN Ruthenium, carbonylchloro[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis(triethylphosphine)-, (OC-6-42)- (9CI) (CA INDEX NAME)

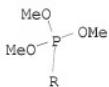
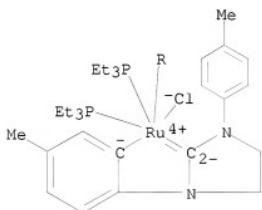


RN 72871-23-9 CAPLUS
 CN Ruthenium, chloro(1,3-diethyl-2-imidazolidinylidene)[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)](triphenylphosphine)-, (SP-5-53)- (9CI) (CA INDEX NAME)



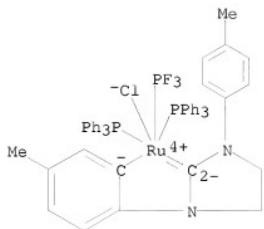
RN 72871-24-0 CAPLUS

CN Ruthenium, chloro[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]]bis(trimethyl phosphite-P)-, (OC-6-45)- (9CI) (CA INDEX NAME)

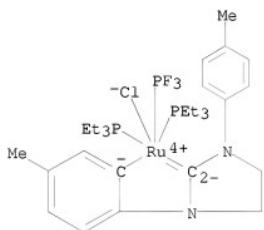


RN 72871-25-1 CAPLUS

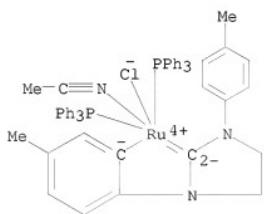
CN Ruthenium, chloro[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]](phosphorous trifluoride)bis(triphenylphosphine)-, (OC-6-45)- (9CI) (CA INDEX NAME)



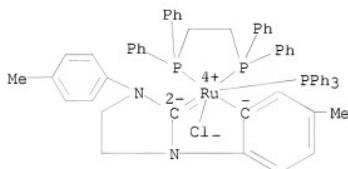
RN 72871-26-2 CAPLUS
CN Ruthenium, chloro[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]](phosphorous trifluoride)bis(triethylphosphine)−, (OC-6-45)− (9CI) (CA INDEX NAME)



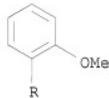
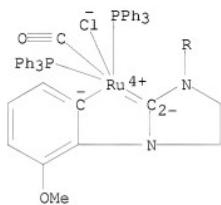
RN 72871-27-3 CAPLUS
CN Ruthenium, (acetonitrile)chloro[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]]bis(triphenylphosphine)−, (OC-6-42)− (9CI) (CA INDEX NAME)



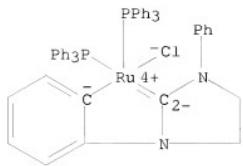
RN 72871-28-4 CAPLUS
CN Ruthenium, chloro[1,2-ethanediylbis(diphenylphosphine)-P,P'][(5-methyl-1,2-phenylene){3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene}](triphenylphosphine)-, (OC-6-43)- (9CI) (CA INDEX NAME)



RN 72871-29-5 CAPLUS
CN Ruthenium, carbonylchloro{(3-methoxy-1,2-phenylene){3-(2-methoxyphenyl)-1-imidazolidinyl-2-ylidene}}bis(triphenylphosphine)-, (OC-6-42)- (9CI) (CA INDEX NAME)

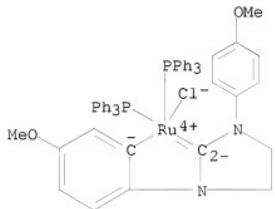


RN 72871-30-8 CAPLUS
CN Ruthenium, chloro[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis(triphenylphosphine)-, (SP-5-43)- (9CI) (CA INDEX NAME)



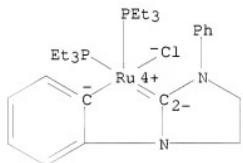
RN 72871-31-9 CAPLUS

CN Ruthenium, chloro[5-methoxy-1,2-phenylene][3-(4-methoxyphenyl)-1-imidazolidinyl-2-ylidene]bis(triphenylphosphine)-, (SP-5-43)- (9CI) (CA INDEX NAME)



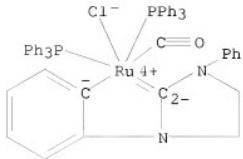
RN 72871-32-0 CAPLUS

CN Ruthenium, chloro[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis(triethylphosphine)-, (SP-5-43)- (9CI) (CA INDEX NAME)



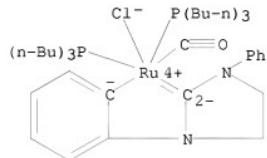
RN 72882-43-0 CAPLUS

CN Ruthenium, carbonylchloro[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis(triphenylphosphine)-, (OC-6-42)- (9CI) (CA INDEX NAME)



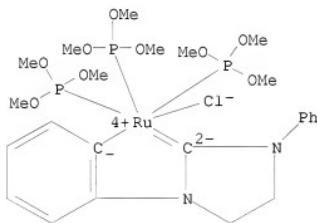
RN 72882-44-1 CAPLUS

CN Ruthenium, carbonylchloro[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]bis(tributylphosphine)-, (OC-6-42)- (9CI) (CA INDEX NAME)



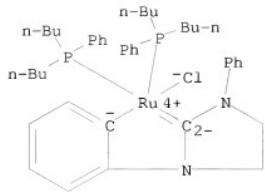
RN 72882-45-2 CAPLUS

CN Ruthenium, chloro[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]tris(trimethyl phosphite-P)-, (OC-6-34)- (9CI) (CA INDEX NAME)



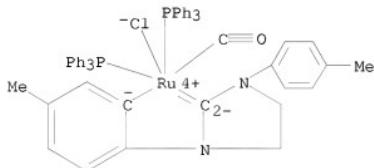
RN 72882-46-3 CAPLUS

CN Ruthenium, chlorobis(dibutylphenylphosphine)[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]-, (SP-5-43)- (9CI) (CA INDEX NAME)



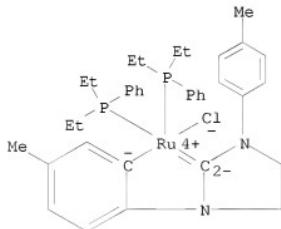
RN 72904-24-6 CAPLUS

CN Ruthenium, carbonylchloro[(5-methyl-1,2-phenylene){3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene}]bis(triphenylphosphine)-, (OC-6-42)- (9CI) (CA INDEX NAME)



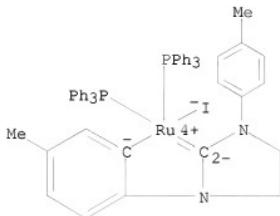
RN 73016-72-5 CAPLUS

CN Ruthenium, chlorobis(diethylphenylphosphine)[(5-methyl-1,2-phenylene){3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene}]-, (SP-5-43)- (9CI) (CA INDEX NAME)



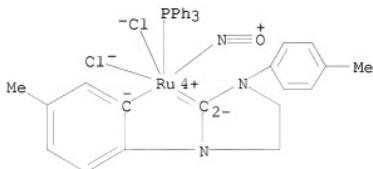
RN 73016-73-6 CAPLUS

CN Ruthenium, iodo[(5-methyl-1,2-phenylene){3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene}]bis(triphenylphosphine)-, (SP-5-43)- (9CI) (CA INDEX NAME)



RN 73016-74-7 CAPLUS

CN Ruthenium, dichloro[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]]nitrosyl(triphenylphosphine)-, (OC-6-42)- (9CI)
(CA INDEX NAME)



L4 ANSWER 44 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1979:474697 CAPLUS

DOCUMENT NUMBER: 91:74697

ORIGINAL REFERENCE NO.: 91:12085a,12088a

TITLE: Synthesis and characterization of new cyclopalladated carbene complexes

AUTHOR(S): Hiraki, K.; Onishi, M.; Sugino, K.

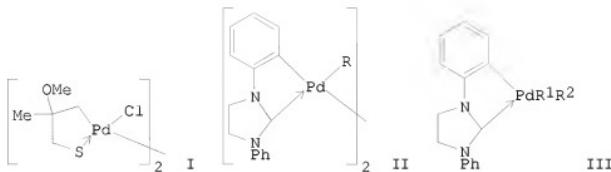
CORPORATE SOURCE: Fac. Eng., Nagasaki Univ., Nagasaki, Japan

SOURCE: Journal of Organometallic Chemistry (1979), 171(3), C50-C52

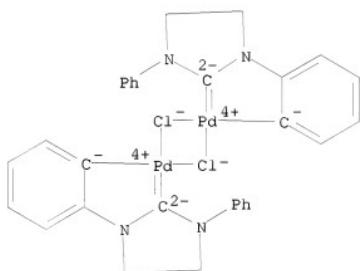
DOCUMENT TYPE: CODEN: JORCAI; ISSN: 0022-328X

LANGUAGE: Journal

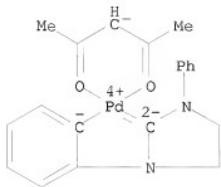
GI: English



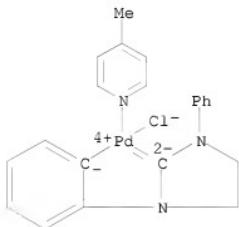
- AB Treating dipalladium complex I with bis(1,3-diphenyl-2-imidazolidinylidene) gave 46.2% chloro-bridged carbene complex II ($R = Cl$) having a cyclopalladated chelate structure involving a Pd-carbene and a Pd-aryl bond. Reactions with II ($R = Cl$) gave II ($R = Br$, OAc) and III ($R1 = Cl$, $R2 = 4$ -methylpyridine; $R1R2 = acetylacetato$).
IT 70882-99-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reactions of)
RN 70882-99-4 CAPLUS
CN Palladium, di- μ -chlorobis[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]di- (9CI) (CA INDEX NAME)



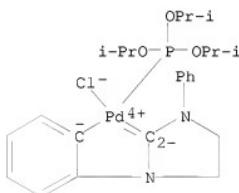
- IT 70883-00-0P 70883-01-1P 70883-02-2P
70883-03-3P 70883-04-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 70883-00-0 CAPLUS
CN Palladium, (2,4-pantanediolato- O,O')[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]-, (SP-4-3)- (9CI) (CA INDEX NAME)



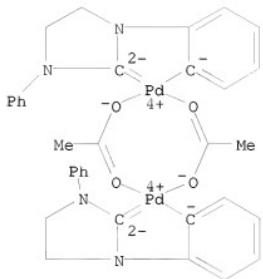
RN 70883-01-1 CAPLUS
CN Palladium, chloro(4-methylpyridine)[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]- (9CI) (CA INDEX NAME)



RN 70883-02-2 CAPLUS
CN Palladium, chloro[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)][tris(1-methylethyl) phosphite-P]-, (SP-4-4)- (9CI) (CA INDEX NAME)

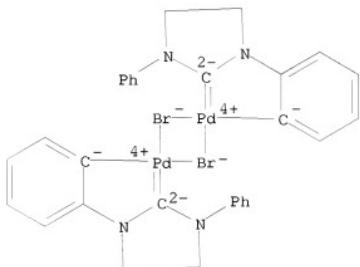


RN 70883-03-3 CAPLUS
CN Palladium, bis[μ-acetato-O,O']bis[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]di- (9CI) (CA INDEX NAME)



RN 70883-04-4 CAPLUS

CN Palladium, di- μ -bromobis[1,2-phenylene(3-phenyl-1-imidazolidinyl-2-ylidene)]di- (9CI) (CA INDEX NAME)



L4 ANSWER 45 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1977:517948 CAPLUS

DOCUMENT NUMBER: 87:117948

ORIGINAL REFERENCE NO.: 87:18737a, 18740a

TITLE: Spontaneous N-aryl (rather than P-aryl)

orthometalation in the dichlorotris(triphenylphosphine)ruthenium-bi-1,3-di-p-tolylimidazolidinylidene system; x-ray crystal and molecular structure of a stereochemically rigid 5-coordinate RuII complex, with a short (2.2 Å) Ru...H contact

AUTHOR(S): Hitchcock, Peter B.; Lappert, Michael F.; Pye, Peter L.

CORPORATE SOURCE: Sch. Mol. Sci., Univ. Sussex, Brighton, UK

SOURCE: Journal of the Chemical Society, Chemical

Communications (1977), (7), 196-8

CODEN: JCCCAT; ISSN: 0022-4936

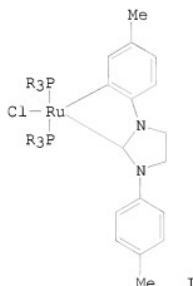
DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI



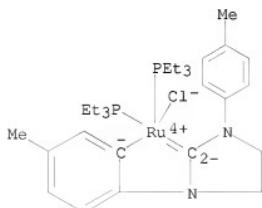
AB [RuCl₂(PPh₃)₃] with bi-1,3-di-p-tolylimidazolidinylidene in xylene at 140° gave the complex I (R = Ph). The reaction involves carbene-metal formation accompanied by ortho metalation. I (R = Ph) with PEt₃ gave I (R = Et). X-ray crystallog. anal. of I (R = Et) showed that Ru-Ccarbene [1.908(5) Å] is significantly shorter than Ru-Caryl [1.994(5) Å]. I (R = Et) is stereochem. rigid probably because of the close Ru-tpbnd.H contact.

IT 64055-31-8P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and crystal structure of)

RN 64055-31-8 CAPLUS

CN Ruthenium, chloro[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinylidene]bis(triethylphosphine)-, (SP-4-3)- (9CI) (CA INDEX NAME)



IT 64055-27-2P 64055-28-3P 64055-29-4P

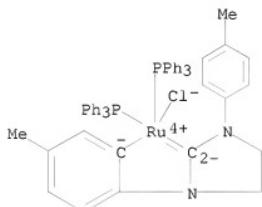
10568344b.trn

64055-30-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

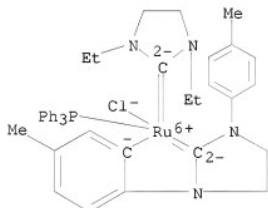
RN 64055-27-2 CAPLUS

CN Ruthenium, chloro[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]]bis(triphenylphosphine)-, (SP-5-43)- (9CI) (CA INDEX NAME)



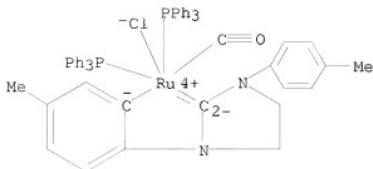
RN 64055-28-3 CAPLUS

CN Ruthenium, chloro(1,3-diethyl-2-imidazolidinylidene)[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]](triphenylphosphine)- (9CI) (CA INDEX NAME)



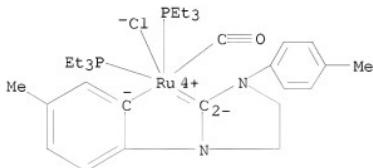
RN 64055-29-4 CAPLUS

CN Ruthenium, carbonylchloro[(5-methyl-1,2-phenylene)[3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene]]bis(triphenylphosphine)- (9CI) (CA INDEX NAME)



RN 64055-30-7 CAPLUS

CN Ruthenium, carbonylchloro((5-methyl-1,2-phenylene)(3-(4-methylphenyl)-1-imidazolidinyl-2-ylidene))bis(triethylphosphine)- (9CI) (CA INDEX NAME)



=> log h

COST IN U.S. DOLLARS

SINCE FILE
ENTRYTOTAL
SESSION

FULL ESTIMATED COST

255.80

441.90

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
ENTRYTOTAL
SESSION

CA SUBSCRIBER PRICE

-36.90

-36.90

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 19:37:56 ON 16 JUN 2009